



THE UNIVERSITY *of* EDINBURGH

Edinburgh Research Explorer

Wildlife Law and the Empowerment of the Poor

Citation for published version:

Morgera, E 2011, Wildlife Law and the Empowerment of the Poor. Food and Agriculture Organization of the United Nations.

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Publisher's PDF, also known as Version of record

Publisher Rights Statement:

© Morgera, E. (2011). Wildlife Law and the Empowerment of the Poor. Food and Agriculture Organization of the United Nations.

General rights

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.





ISSN 1014-6679

**FAO
LEGISLATIVE
STUDY**

103

Wildlife law and the empowerment of the poor



Wildlife law and the empowerment of the poor

FAO
LEGISLATIVE
STUDY

103

by
Elisa Morgera

for the
Development Law Service
FAO Legal Office

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned.

ISBN 978-92-5-106710-9

All rights reserved. FAO encourages reproduction and dissemination of material in this information product. Non-commercial uses will be authorized free of charge, upon request. Reproduction for resale or other commercial purposes, including educational purposes, may incur fees. Applications for permission to reproduce or disseminate FAO copyright materials, and all other queries concerning rights and licences, should be addressed by e-mail to copyright@fao.org or to the Chief, Publishing Policy and Support Branch, Office of Knowledge Exchange, Research and Extension, FAO, Viale delle Terme di Caracalla, 00153 Rome, Italy.

© FAO 2011

CONTENTS

PREFACE	vii
PART I - OVERVIEW	
INTRODUCTION	3
1. INTERNATIONAL FRAMEWORK	7
1.1 Species-based international agreements	7
1.1.1 The Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES)	8
1.1.2 The Convention on the Conservation of Migratory Species of Wild Animals (CMS)	15
1.2 Area-based international agreements	17
1.3 The Convention on Biological Diversity	18
1.3.1 Relevant COP Decisions	21
1.3.2 Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity	24
1.4 The Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention)	26
1.5 Relevant human rights instruments	29
1.6 Guidance from IUCN	31
1.7 The European Union (EU) and wildlife law	34
1.7.1 The Birds Directive	35
1.7.2 The Habitats Directive	36
1.7.3 CITES Regulation	39
1.8 Regional instruments	41
1.8.1 European instruments	41
1.8.2 African instruments	43
1.8.3 Latin American agreements	48
1.8.4 Instruments in Asia and Oceania	49
1.8.5 An inter-regional initiative: the Agreement on International Humane Trapping Standards	51
1.9 Concluding remarks	51

PART II – ELEMENTS OF NATIONAL WILDLIFE LEGISLATION

2.	METHODOLOGICAL ISSUES	55
2.1	Developing a wildlife policy or strategy	55
2.2	Drafting clear and understandable legislation	58
2.3	Adopting an integrated approach	62
2.4	Avoiding legislative overreaching	66
3.	INSTITUTIONS AND PUBLIC PARTICIPATION	69
3.1	Ensuring clarity in the institutional set-up	70
3.2	Ensuring inter-institutional coordination	74
3.3	Guaranteeing public participation in wildlife-related decision-making	82
3.4	Public access to wildlife-related information	94
3.5	Public access to wildlife-related justice	96
3.6	Clarifying wildlife tenure and its legal consequences	101
3.7	Ensuring gender equity	108
3.8	Food security	110
4.	MANAGEMENT PLANNING	112
4.1	Establishing a system for information-gathering and monitoring	115
	4.1.1 Inter-disciplinary and participatory approach	119
4.2	Requiring management planning as a prerequisite to formal management	122
	4.2.1 Coordination among multiple planning exercises	128
	4.2.2 Public participation in management planning	130
4.3	Sharing management planning responsibilities between central and local authorities and with local communities	135
4.4	Providing for international cooperation where multinational decision-making and coordination are needed	140
5.	CONSERVATION	141
5.1	Using a species-based approach in a participatory way	143
5.2	Using an area-based approach in a participatory way	153
5.3	Involving local stakeholders in wildlife conservation	163
5.4	Protecting wildlife from harmful processes and land uses	171
5.5	Wildlife health	177
5.6	Human-wildlife conflicts	179

6.	SUSTAINABLE USE	185
6.1	Defining and regulating different types of wildlife use	186
6.2	Eco-tourism	189
6.3	Ranching and breeding	194
6.4	Wildlife trade	201
6.5	Hunting	204
	6.5.1 Accurately identifying game and non-game species	205
	6.5.2 Providing for an adaptive, science-based determination of hunting quotas	207
	6.5.3 Establishing procedural mechanisms for flexible and adaptive hunting seasons	210
	6.5.4 Clearly defining hunting areas	212
	6.5.5 Regulating hunting methods	216
	6.5.6 Ensuring a transparent and effective allocation of hunting rights	218
	6.5.7 Traditional hunting	225
	6.5.8 Regulating hunting tourism	232
6.6	Sharing of benefits	234
6.7	Community-based sustainable use of wildlife	241
6.8	Ensuring sustainable management of wildlife by the private sector	251
7.	IMPLEMENTATION AND LAW ENFORCEMENT	259
7.1	Providing incentives for complying with the law	260
7.2	Returning financial resources to improved wildlife management	263
7.3	Striking a balance between service provision and law enforcement mechanisms	271
7.4	Monitoring harvests and trade	278
8.	CONCLUSIONS	280
	BIBLIOGRAPHY	285
	LEGISLATION REVIEWED	291

PREFACE

There is a wide variety of interests to be balanced in wildlife management. These interests range from the conservation of biodiversity and specific endangered species and their habitats, to valuable opportunities in eco-tourism or hunting tourism, to the needs and traditions of the local population relating to hunting and collection of animals or their product for cultural/religious practices. Although revenues from the wildlife sector may be considered irrelevant as a contribution to the national gross domestic product, wildlife's influence on local economies can be significant. Some rural communities see wildlife as a source of food. Some see wildlife habitat as potential timber or farmland. And some see wildlife hunting or eco-tourism as a source of cash.

Good laws can provide a framework for good wildlife management. An appropriate legal framework can conserve wildlife while reducing poverty and increasing food security. Enacting effective legal reforms, though, remains challenging.

In 2007–2008, FAO and the International Council for Game and Wildlife Conservation (CIC) reviewed legislation on wildlife management in Western and Central Asia. This review launched a regional dialogue on international obligations and standards on wildlife management, based on current challenges at national and regional levels.

This regional initiative led to a set of design principles on how to develop effective national legislation on sustainable wildlife management (available at www.fao.org/legal). These principles sought to provide tools for the analysis of existing legal frameworks, as well as provide guidance for developing new legislation based on international standards and best practices. In addition, the principles aim to help decision-makers, legal drafters and resource managers to understand wildlife legislation, engage in participatory and interdisciplinary legislative drafting, and use legislation to support sustainable wildlife management for the empowerment of the poor and environmental sustainability.

In 2009, FAO undertook to further refine these principles, taking into account the challenges faced and lessons learnt by wildlife legislators in other regions of the world. To this end, a series of regional studies examined the legislation of selected countries in Africa, Latin America, South-east Asia and Oceania.¹ These studies analysed laws concerning wildlife tenure (ownership and use rights and obligations, links with land and forest tenure), public participation in wildlife decision-making and planning, and community-based wildlife management. The purpose was to identify legal tools that allow disadvantaged people to directly benefit from wildlife management, thereby improving food security, alleviating poverty, enhancing rural livelihoods and ultimately contributing to the legal empowerment of the poor.² The studies also considered the strengths and weaknesses of current legal frameworks in promoting environmental sustainability and socio-economic development.

The present study synthesizes and analyses the findings of the above-mentioned regional legal reviews, identifies current trends and shortcomings, and singles out innovative legal solutions. On this basis, it also refines the design principles to develop effective national legislation on sustainable wildlife management, emphasizing the legal tools that empower the poor, particularly local and indigenous communities.

Several experts have contributed in the past two years to this project: Maria Teresa Cirelli, James Wingard, Alessandro Fodella, Elsa Tsiumani and Soledad Aguilar (FAO international legal consultants); Jacqueline Alastra and Ileana Papadopoulou (FAO legal interns); Victor Mosoti (former Attaché du Cabinet, FAO); Ali Mekouar (Director of FAO Conference, Council and Protocol Affairs Division, former Chief of the FAO Development Law Service); René Czudek (FAO Sub-Regional Forestry Officer for Southern Africa); Edgar Kaeslin (FAO Wildlife and Protected Area Management Officer); Kai-Uwe Wollscheid (Director General, International Council for Game and Wildlife Conservation); Michel Laverdiere (FAO Sub-Regional Forestry Officer for Eastern Africa); Fernando Salinas (Sub-Regional Forestry Officer for Western Africa); Patrick Durst (FAO Senior Forestry Officer, Asia and Pacific); Tracy McCracken (FAO Deputy Wildlife

¹ All studies are available at www.fao.org/legal and are listed in the bibliography.

² This concept has been developed by the Commission on Legal Empowerment of the Poor, established under the aegis of the United Nations between 2005 and 2008. The commission completed its mandate in 2008. See www.undp.org/legalempowerment. At its sixty-third session on 11 December 2008, the UN General Assembly, in a brief resolution (63/142), took note of the final report of the commission, stressing the importance of sharing best national practices in the area of legal empowerment of the poor.

Coordinator, Infectious Disease Group); Margret Vidar and Patrice Talla (FAO Legal Officers). Editorial assistance was kindly provided by Jesse Bellam and Lin Hu (FAO legal interns) and by Riccardo Beltrame.

The present study was authored by Elisa Morgera (former FAO Legal Officer), with substantive inputs and editorial assistance from Ken Rosenbaum (FAO International Legal Consultant), as a joint project of the FAO Development Law Service and the Land Tenure and Management Unit.

Blaise Kuemlangan
Officer in charge
Development Law Service

Paul Munro-Faure
Chief
Land Tenure and Management Unit

PART I - OVERVIEW

INTRODUCTION

Wildlife¹ management is the process of keeping wildlife populations, including endangered species, at desirable levels using scientific, technical and traditional knowledge. **Sustainable** wildlife management adds the aim of balancing the economic, ecological and social values of wildlife, to protect the interests of present and future generations. Thus, this concept looks beyond hunting and protection of individual species and focuses holistically on wildlife as a renewable resource.

Law is a key tool to achieve sustainable wildlife management. It sets the parameters for protection and use of wild animals.

Over time, both the approach and the aims of law have broadened. Approaches have grown from simple property notions (who owns the animals or holds the rights to hunt them) to include more detailed regulatory, procedural and economic provisions. Aims have shifted from single-species management to more comprehensive goals including sustainable use of biodiversity. A number of ideas have informed these trends, among them, first the recognition of the interdependence among different species and the direct and indirect threats to wildlife, and second the broad appeal of a people-centred approach to wildlife management – meaning, the participation of concerned individuals in wildlife-related decision-making, the involvement of indigenous and local communities in wildlife management and the sharing of its benefits.

Legislation may allow all members of society and particularly, disadvantaged people, to directly benefit from wildlife management, improving food security, alleviating poverty, enhancing rural livelihoods and ultimately contributing to the legal empowerment of the poor. This concept has been developed by the Commission on Legal Empowerment of the Poor, established under the aegis of the United Nations between 2005 and 2008. According to the commission,² four pillars sustain the concept of legal empowerment of the poor: access to justice and the rule of law; property rights; labour rights; and business rights. Adequate wildlife management

¹ In the present study, wildlife is referred to as including terrestrial and avian wild animal species.

² The commission completed its mandate in 2008. See www.undp.org/legalempowerment. At its sixty-third session on 11 December 2008, the UN General Assembly, in a brief resolution (63/142), took note of the final report of the commission, stressing the importance of sharing best national practices in the area of legal empowerment of the poor.

legislation may contribute to the implementation of at least three of these pillars. For the first pillar, it may set out measures to promote equality under the law, clarity of rights and obligations, and access to justice. For the second pillar, it may allocate property rights, or related use rights over wildlife and its products, so that benefits are equitably shared, taking into account subsistence requirements, traditional titles and practices and disadvantages faced. For the fourth pillar, it may regulate contracts and other arrangements for wildlife use so that income-generating opportunities are available for all. This study identifies ownership of wildlife resources and other management rights and their tenure security as particularly critical for the empowerment of the poor.

Good wildlife law supports and is supported by good governance. Good administration of the recognition, allocation and possible revocation of wildlife rights provides legal certainty, which is essential to convince wildlife users and managers to operate responsibly with a long-term perspective. Public participation in decision-making and in planning, as well as access to justice, contribute to transparency, accountability, and balancing of the diverse interests of society – in particular of the poor, other disadvantaged groups and indigenous communities. Fair sharing of benefits, along with supportive business and lending frameworks, creates incentives for wildlife management. All these – good administration, public participation and fair benefit sharing – in turn lead to greater public respect for the law.

This study is a guide for those looking to improve national wildlife laws with a view to ensuring environmental sustainability and strengthening the role of disadvantaged people and increasing their participation in the sharing of benefits. In doing so, this study concentrates on legal tools for the empowerment of local and indigenous communities, as mandated by the Convention on Biological Diversity in recognition of their traditional knowledge, innovation and practices that contribute to the conservation and sustainable use of biological diversity. This also reflects the findings of the first State of the World's Indigenous Peoples' Report, released in 2010 by the UN Forum on Indigenous Issues,³ which underscored that the 370 million indigenous peoples worldwide comprise one-third of the world's extremely poor rural people.

³ The full text of the report is available at www.un.org/esa.

The study singles out trends, challenges and innovative legal solutions from national legislation in different regions of the world. It identifies both strengths and weaknesses of legal frameworks. It often highlights a menu of legal options, rather than just one solution, to allow each country to identify the ones most appropriate to local circumstances, policies and needs. It is a synthesis and further elaboration of the following regional studies:

- Morgera, E., Wingard, J. and Fodella A. 2009. "Developing Sustainable Wildlife Legislation in Central and Western Asia" FAO/CIC;
- Cirelli, M.T. and Morgera, E., 2009. "Wildlife law and the legal empowerment of the poor in Sub-Saharan Africa" FAO Legal Paper Online No. 77;
- Cirelli, M.T. and Morgera, E., 2009. "Wildlife law and the legal empowerment of the poor in Sub-Saharan Africa: additional case studies" FAO Legal Paper Online No. 79;
- Aguilar, S. and Morgera, E. 2009. "Wildlife law and the legal empowerment of the poor in Latin America" FAO Legal Paper Online No. 80; and
- Tsioumani, E. and Morgera E., 2010. "Wildlife law and the legal empowerment of the poor in South-East Asia and Oceania" FAO Legal Paper Online No. 83.⁴

Chapter 1 starts by describing the international legal framework related to biodiversity and environmental protection, as well as the key decisions and guidelines adopted by the parties to these agreements. In addition, it analyses guidance from the International Union for the Conservation of Nature, discusses wildlife-related legislation adopted by the European Union, and illustrates regional instruments in Europe, Africa, Asia, Oceania and Latin America.

The remaining chapters analyse trends in national wildlife management around the globe, singling out innovative legal solutions as well as common challenges to ensure environmental sustainability and the empowerment of the poor. They distil general recommendations and set out specific legal options for the improvement of national legislation on wildlife management. Chapter 2 addresses concerns about good legal drafting that are applicable to laws on renewable natural resources in general, with a view to providing

⁴ FAO Legal Papers Online are all available at www.fao.org/legal.

methodological guidance to wildlife law drafters. Chapter 3 then focuses on creating an effective institutional set-up for wildlife management – allowing coordination, public participation, as well as public access to information and justice – clarifying wildlife tenure and its legal consequences, and addressing gender and food security considerations. Chapter 4 discusses wildlife management planning as an overarching mechanism for wildlife conservation and sustainable use, investigating its legal implications. It pays specific attention to information gathering, planning processes, stakeholder involvement in planning and multinational planning. Chapter 5 discusses conservation issues: looking into species-based and area-based approaches in turn, protecting wildlife through environmental impact assessments and stakeholder participation in conservation – focusing specifically on participatory approaches to decision-making and community-based wildlife conservation initiatives. It also addresses questions related to human-wildlife conflicts. Chapter 6 is devoted to sustainable use, exploring different legal options for different uses (namely, hunting, eco-tourism, trade, ranching and breeding). It pays specific attention to the empowerment of the poor in relation to wildlife use, by analysing the regulation of traditional use, as well as legal tools for benefit-sharing, community-based wildlife use and communities' participation in wildlife management by the private sector. Chapter 7 turns to legal tools that facilitate implementation and enforcement, addressing specifically incentives, financial resources, enforcement powers and monitoring through the lenses of public participation. Each of these chapters draws attention to underlying international obligations and standards described in Chapter 1. The conclusions summarize the most significant recommendations for national decision-makers and legal drafters aiming to strengthen wildlife management legal frameworks to empower the poor and ensure environmental sustainability.

1. INTERNATIONAL FRAMEWORK

International law has long addressed wildlife management. Initially its focus was on the protection of certain species or habitats. More recently, its focus has shifted to more comprehensive approaches, epitomised by the innovative features of the Convention on Biological Diversity.

Two kinds of international legally binding agreements are primarily important for the review and drafting of effective national legislation on sustainable wildlife management. The first are agreements focusing on wildlife, which may either pose limits to national sovereignty or demand application of specific principles, methods and processes in national legislation. The second are agreements that address cross-cutting environmental issues, which implicitly cover wildlife management and may also require states to adopt certain provisions in their national wildlife laws. This is the case, for instance, of the Aarhus Convention on Access to Information, Public Participation and Access to Justice in Environmental Matters.

Other international and regional conventions and initiatives may provide useful reference for national legal drafters. This chapter will in particular address relevant international instruments on human rights, guidance from the International Union for the Conservation of Nature (IUCN), as well as regional wildlife-related initiatives in Europe, Africa, Asia, Oceania and Latin America.

Many of these international instruments and initiatives not only address environmental matters but also legal empowerment of the poor, in particular with reference to community-based management and benefit-sharing. Accordingly, sustainable wildlife management can contribute to reaching not only **Millennium Development Goal** (MDG) 7 – ensuring environmental sustainability – but also MDG-1 – eradicating extreme poverty and hunger.⁵

1.1 Species-based international agreements

Endangered species legislation involves a specialized legal approach to wildlife management. It focuses exclusively on the identification and restoration of species that have reached critically low population levels, on

⁵ See www.un.org/millenniumgoals.

the basis of defined criteria and procedures for **listing** these species and at least two general mechanisms designed to ensure recovery of individual species. Listing criteria and procedures use science-based definitions of "threatened" and/or "endangered," both of which imply an assessment of the status of the species and the threats to their continued survival. The primary mechanism for recovery is the requirement that government agencies and private developers consider listed species in designing and constructing projects and include adequate protection measures to minimize or mitigate project impacts and ensure the species long-term survival or recovery. The second mechanism is the prohibition of direct and/or incidental "take" of the species in question. "Take" includes the killing of such species by whatever means (not just hunting), as well as any actions that remove a species from its habitat, destroy critical habitat, or otherwise harm, harass, or injure the species (see the definition provided by the Convention on Migratory Species in Box 1-2).

Two major international wildlife agreements are species-based and focus on the immediate protection of certain species by the adoption of lists, differentiating among listed species according to the degree of threat. These lists take the form of appendices to the convention, some of which cover the most endangered species for which the use is prohibited (albeit with certain exceptions), while others cover less endangered species, the use of which is allowed but should be controlled. The parties to the conventions regularly update these appendices in periodic meetings (usually those of Conferences of the Parties or COPs). International listings are usually combined with a permit system, thus requiring the enactment of national legislation to this effect (Birnie and Boyle, 2002).

1.1.1 The Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES)

CITES (Washington, 1973)⁶ aims to ensure that international trade in wild animals and plants does not threaten their survival. CITES therefore restricts their trade through export permit systems. For species threatened with extinction that are or may be affected by trade (listed in Appendix I to the convention), parties may grant export permits for non-commercial purposes only in exceptional circumstances and subject to strict requirements. The importation of these species also requires a permit, while trade for primarily

⁶ For the full text of the convention and information about its implementation, see www.cites.org.

commercial purposes is banned. For species that may become endangered if their trade is not subject to strict regulation (listed in Appendix II), parties may grant export permits (including for commercial trade) if export is not detrimental to the survival of that species and if other requirements are met. A third list concerns species subject to national regulation and needing international cooperation for trade control (listed in Appendix III): in this case, parties may grant export permits for specimens obtained in accordance with national regulations. The COP adds or deletes species from the appendices according to established criteria. It should be also noted that CITES specifically enables parties to adopt stricter domestic measures (article 14).

The convention requires states to adopt legislation that:

- (i) designates at least one management authority and one scientific authority;
- (ii) prohibits trade in specimens in violation of the convention;
- (iii) penalizes such trade;
- (iv) calls for the confiscation of specimens illegally traded or possessed.

Before an authority can grant an export permit covering an Appendix II species, the authority must find that such export "will not be detrimental" to the survival of that species. CITES therefore requires countries to undertake **non-detriment finding procedures** to allow the commercial export of Appendix II species. To make such a finding, a party needs to have information about a species' status, needs, threats and management. In effect, this entails the development of national management plans for commercially relevant endangered species.

Box 1-1: CITES listing criteria

In 1994, the COP adopted updated criteria for listing species, repealing those long in force. The new criteria encompass general principles such as the **precautionary principle**, which implies that in case of uncertainty either as regards the status of a species or the impact of trade on the conservation of a species, parties should act in the best interest of the conservation of the species concerned and adopt measures that are proportionate to the anticipated risks to the species (CITES Conf. 9.24 (Rev. COP14)).

Accordingly, a species **"is or may be affected by trade"**

(relevant for Appendix I species) if:

- (i) it is known to be in trade (using the definition of 'trade' in Article I of the convention), and that trade has or may have a detrimental impact on the status of the species; or
- (ii) it is suspected to be in trade, or there is demonstrable potential international demand for the species, that may be detrimental to its survival in the wild.

In addition, a species is considered to be **"threatened with extinction"** (relevant for Appendix I species) if it meets, or is likely to meet, at least one of the following criteria:

A. The wild population is small, and is characterized by at least one of the following:

- (i) an observed, inferred or projected decline in the number of individuals or the area and quality of habitat; or
- (ii) each subpopulation is very small; or
- (iii) a majority of individuals are concentrated geographically during one or more life-history phases; or
- (iv) large short-term fluctuations in population size; or
- (v) a high vulnerability to either intrinsic or extrinsic factors.

B. The wild population has a restricted area of distribution and is characterized by at least one of the following:

- (i) fragmentation or occurrence at very few locations; or
- (ii) large fluctuations in the area of distribution or the number of subpopulations; or
- (iii) a high vulnerability to either intrinsic or extrinsic factors; or
- (iv) an observed, inferred or projected decrease in any one of the following:
 - the area of distribution; or
 - the area of habitat; or
 - the number of subpopulations; or
 - the number of individuals; or
 - the quality of habitat; or
 - the recruitment.

C. A marked decline in the population size in the wild, which has been either:

- (i) observed as ongoing or as having occurred in the past (but with a potential to resume); or
- (ii) inferred or projected on the basis of any one of the following:
 - a decrease in area of habitat; or
 - a decrease in quality of habitat; or
 - levels or patterns of exploitation; or
 - a high vulnerability to either intrinsic or extrinsic factors; or
 - a decreasing recruitment.

Source: CITES Resolution Conf. 9.24 (Rev. COP14).

In the last decade, the CITES COP has adopted several resolutions on enforcement and compliance, recommending confiscation of specimens exported illegally; on disposal of confiscated specimens or their parts or derivatives; and on greater coordination between competent authorities, and outlining measures to promote enforcement, such as creating appropriate incentives for local and rural communities. The COP has also adopted resolutions on trade in specified species, and on ranching and breeding of protected species. The importance of compliance and the adequacy of legislation has recently been underlined in the CITES Strategic Vision 2008–2013 (CITES Resolution Conf. 14.2). Parties are called to comply with their obligations under the convention through appropriate policies and legislation, by establishing transparent, practical, coherent and user-friendly administrative procedures, and reducing unnecessary administrative burdens. The Strategic Vision stresses that implementation of the convention at the national level must be consistent with COP decisions. National drafters, law enforcement officers and wildlife managers should, therefore, keep abreast of the outcomes of the periodic decision-making by the COP.

In the framework of CITES, **breeding** concerns animal specimens born or otherwise produced in a controlled environment,⁷ and CITES relaxes some

⁷ i.e. an environment that is manipulated for the purpose of producing animals of a particular species, that has boundaries designed to prevent animals, eggs or gametes of the species from entering or leaving the controlled environment, and the general characteristics of which may include but are not limited to: artificial housing; waste removal; health care; protection from predators; and artificially supplied food.

of the controls on captive bred specimens. CITES treats Appendix I species that have bred in captivity for commercial purposes as Appendix II species (article 7(4)). CITES therefore requires an export permit or re-export certificate but no import permit; the housing of live specimens is not subject to conditions and the specimens can be imported for primarily commercial purposes. Appendix I animals bred in captivity for non-commercial purposes and Appendix II and III animals bred in captivity for either commercial or non-commercial purposes only need a certificate that the animal was bred in captivity (which replaces import and export permits and re-export certificates) (article 7(5)). In addition, species of which all specimens in trade have been bred in captivity should not be included in appendices, if there is negligible probability of trade taking place in specimens of wild origin (Wijnstekers, undated).

The COP expressed the concern that, in spite of the adoption of several resolutions, much trade in specimens declared as bred in captivity remains contrary to the convention and may be detrimental to the survival of wild populations (Resolution Conf. 10.16 (Rev.)). The COP therefore refined the criteria for the applicability of provisions on captive breeding. It declared that the captive breeding exemptions of Article 7 apply only if:

- the parents mated or gametes were otherwise transferred in a controlled environment, if reproduction is sexual, or the parents were in a controlled environment when development of the offspring began, if reproduction is asexual; and
- the breeding stock, to the satisfaction of the competent government authorities of the exporting country:
 - was established in accordance with the provisions of CITES and relevant national laws and in a manner not detrimental to the survival of the species in the wild;
 - is maintained without the introduction of specimens from the wild, except for the occasional addition of animals, eggs or gametes, in accordance with the provisions of CITES and relevant national laws and in a manner not detrimental to the survival of the species in the wild as advised by the Scientific Authority:
 1. to prevent or alleviate deleterious inbreeding, with the magnitude of such addition determined by the need for new genetic material;
 2. to dispose of confiscated animals; or
 3. exceptionally, for use as breeding stock; and
 - has produced offspring of second generation or subsequent generation in a controlled environment; or is managed in a manner

that has been demonstrated to be capable of reliably producing second-generation offspring in a controlled environment.

These requirements seem particularly significant for national legal drafters wishing to discipline the matter at the domestic level. In addition, captive-breeding operations involving Appendix I species for commercial purposes, with the exception of those, including private persons, who occasionally bred specimens (zoos, hobbyists, etc.), must be **registered** (CITES Resolution Conf. 4.15).

Although the text of CITES does not include the word "**ranching**", the COP created provisions for the establishment of ranching operations and trade in their products under the convention. Ranching is the rearing in a controlled environment of specimens taken from the wild. No captive breeding need be involved. If a nation wants to allow ranching of an Appendix I species, it can ask the COP to transfer its national population or a sub-population to Appendix II. The COP will consider the request if the party and its ranching operations meet several requirements.

To be approved, the ranching programme must contribute to the conservation of the species. Under the COP recommendations, the programme must:

- be primarily beneficial to the conservation of the local population (i.e., where applicable, contribute to its increase in the wild or promote protection of habitat while maintaining a stable population);
- ensure the adequate identification and documentation of all products (including live specimens) of each operation, to ensure that they can be readily distinguished from products of Appendix-I populations (COP requires that products bear marks under a uniform marking system that include country and year of origin and a unique identification number);
- have in place appropriate inventories, harvest-level controls and mechanisms to monitor the wild populations; and
- have established sufficient safeguards to ensure that adequate numbers of animals are returned to the wild if necessary and where appropriate.

In addition, the programme must contain:

- evidence that the taking from the wild will have no significant detrimental impact on wild populations;
- an assessment of the likelihood of the biological and economic success of each ranching operation;
- assurance that the operation will be carried out at all stages in a humane (non-cruel) manner; and
- documented evidence to demonstrate that the program is beneficial to the wild population through reintroduction or in other ways (CITES Resolution Conf. 11.16 (Rev. COP14); Wijnstekers, undated).

If a nation wants to support ranching of protected species, it may need legislation addressing some of these points, such as creation of the uniform marking system and requirements for monitoring and documenting ranching activities.

The COP further adopted a specific resolution on **bushmeat**, given that poaching and illicit trade in bushmeat constitute the greatest threat to the survival of some wildlife species, such as gorillas, chimpanzees, elephants and crocodiles, and that illicit trade increases poverty and the food deficit among rural communities. Unregulated trade in and consumption of bushmeat may also bring risks to human health. To address these issues, the COP advised all parties:

- to prohibit the taking of Appendix-I species for consumption as food and to encourage sustainable levels of taking for species in Appendix II and III of the convention;
- to improve the domestic management of CITES-listed species harvested, traded and consumed as bushmeat through a review and, if needed, strengthening of relevant informative, legislative, *in situ* conservation, monitoring, enforcement and social or economic incentives;
- to define clearly the administrative responsibilities of the government agencies that may be involved in, or can contribute to, the domestic regulation of trade in bushmeat and the import, export, re-export and transit or transshipment of bushmeat;
- to clarify or establish property rights regarding CITES-listed species harvested, traded and consumed as bushmeat and to involve local communities in the monitoring of harvest, trade and consumption;

- to review and, if needed, revise logging and other natural resource concessions to ensure that they contribute to the legal, non-detrimental harvesting of trade in and consumption of bushmeat;
- to encourage the adoption of codes of conduct by the timber, fishing and other natural resource extraction industries, that discourage illegal or unsustainable harvesting, consumption and trade in bushmeat; and
- to identify alternative sources of protein and take other measures to reduce the demand for bushmeat and particularly the consumption of specimens of Appendix-I species (CITES Resolution Conf. 13.11).

Some of these steps clearly need supporting legislation at the national level.

1.1.2 The Convention on the Conservation of Migratory Species of Wild Animals (CMS)

CMS (Bonn, 1979)⁸ aims to conserve terrestrial, marine and avian migratory species throughout their range, thus requiring cooperation among "range" states host to species regularly crossing international boundaries. With regard to species considered as endangered (listed in Appendix I), states must conserve and restore their habitats; prevent, remove or minimize impediments to their migration; prevent, reduce and control factors endangering them; and prohibit their taking. With regard to other species that have an unfavourable conservation status (listed in Appendix II), range states undertake to conclude global or regional agreements to maintain or restore concerned species in a favourable conservation status. These agreements may range from legally binding treaties (called agreements) to less formal instruments, such as Memoranda of Understanding (MoU), and can be adapted to the requirements of particular regions. All these instruments set out cooperation mechanisms, including the development of action plans, as well as regular meetings and information-sharing requirements to improve the conservation of migratory wildlife species.

Like CITES, the CMS explicitly allows parties to adopt stricter domestic conservation measures (article 12).

⁸ For the full text of the convention and information about its implementation, see www.cms.int.

Box 1-2: Relevant definitions from CMS Article 1

"Migratory species" means the entire population or any geographically separate part of the population of any species or lower taxon of wild animals, a significant proportion of whose members cyclically and predictably cross one or more national jurisdictional boundaries.

"Conservation status of a migratory species" means the sum of the influences acting on the migratory species that may affect its long-term distribution and abundance.

"Conservation status" will be taken as **"favourable"** when:

- (1) population dynamics data indicate that the migratory species is maintaining itself on a long-term basis as a viable component of its ecosystems;
- (2) the range of the migratory species is neither currently being reduced, nor is likely to be reduced, on a long-term basis;
- (3) there is, and will be in the foreseeable future sufficient habitat to maintain the population of the migratory species on a long-term basis; and
- (4) the distribution and abundance of the migratory species approach, historic coverage and levels to the extent that potentially suitable ecosystems exist and to the extent consistent with wise wildlife management.

"Endangered" in relation to a particular migratory species means that the migratory species is in danger of extinction throughout all or a significant portion of its range.

"Range" means all the areas of land or water that a migratory species inhabits, stays in temporarily, crosses or overflies at any time on its normal migration route.

"Habitat" means any area in the range of a migratory species which contains suitable living conditions for that species.

"Range State" in relation to a particular migratory species means any state ... that exercises jurisdiction over any part of the range of that migratory species

"Taking" means hunting, fishing capturing, harassing, deliberate killing, or attempting to engage in any such conduct.

Source: www.cms.int

1.2 Area-based international agreements

Although species-based treaties often include habitat protection, some agreements focus primarily on conserving habitat (migration routes, feeding or breeding grounds, etc.), once again through a listing system. The main area-based treaties are the Convention on Wetlands of International Importance (Ramsar Convention, Ramsar, 1971), and the Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention, Paris, 1972). Area-based international obligations are usually implemented at the national level through the creation of protected areas (national parks, nature reserves, etc.) and supporting legislation.

According to the **Ramsar Convention**,⁹ parties must designate wetlands in their territory for inclusion in a List of Wetlands of International Importance, and promote their conservation and wise use, for example by establishing nature reserves. "**Wetlands**" are defined as "areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres" (article 1). The concept of "**wise use**" does not forbid or regulate the taking of species for any purpose, but at least such use must not affect the ecological characteristics of wetlands (Birnie and Boyle, 2002). Wise use refers to the "sustainable utilization for the benefit of humankind in a way compatible with the maintenance of the natural properties of the ecosystem" (Rec. C.3.3 rev.). Selection for the Ramsar List should be based on the wetland's significance in terms of ecology, botany, zoology, limnology or hydrology. Parties are also to promote site conservation, including, where appropriate, their wise use; and have also a general obligation to include wetland conservation considerations in their national land-use planning.

The Ramsar Convention has undergone a significant evolution: it was originally named "Convention on Wetlands of International Importance especially as Waterfowl Habitat", in line with its original emphasis on the conservation and wise use of wetlands primarily to provide habitat for waterbirds. Parties now recognize that the convention is applicable to all aspects of wetland conservation and wise use, recognizing wetlands as

⁹ For the full text of the convention and information about its implementation, see www.ramsar.org.

ecosystems that are extremely important for biodiversity conservation in general and for the wellbeing of human communities.

The **World Heritage Convention**¹⁰ provides for the conservation of outstanding natural and cultural sites, which are included in the World Heritage List. Natural areas may include the habitat of threatened species of animals of outstanding universal value from the point of view of science or conservation (article 2). The site has to fulfil conditions of integrity, so it has to be large enough to comprehend the essential components of the support system it represents and be sustainable (Birnie and Boyle, 2002). While responsibility for conservation is primarily vested in the state where the site is located, the convention also provides for international assistance funded by the World Heritage Fund. Parties to the convention must ensure the identification, protection and transmission of natural heritage to future generations. They must adopt protective policies, put in place management services for conservation and take appropriate measures to remove threats (articles 4–5).

1.3 Convention on Biological Diversity (CBD)

As opposed to the sectoral approach of the species- or area-based international treaties, the CBD (Rio de Janeiro, 1992)¹¹ reflects the increased global awareness of the interdependence among species. The convention is not limited to particular species or habitats, but provides for the conservation and sustainable use of biodiversity, defined as "the variability among living organisms", including "diversity within species, between species and of ecosystems" (article 2). Although successive to the other wildlife-related international agreements described above, the CBD has become the "umbrella" for the overall biodiversity-related international regime and has significantly contributed to the evolution of pre-existing treaties and to coordination of their activities. Further, the convention provides guiding principles that drafters should take into account in developing national policy and laws (Birnie and Boyle, 2002).

The CBD has three objectives, which include not only the conservation, but also the **sustainable use** of biodiversity components (thereby including

¹⁰ For the full text of the convention and information about its implementation, see whc.unesco.org.

¹¹ For the full text of the convention and information about its implementation, see www.cbd.int.

wildlife), as well as the equitable sharing of the benefits arising out of the utilization of genetic resources (article 1). Sustainable use is defined as using biodiversity components in a way and at a rate that does not lead to the long-term decline of biological diversity, thus meeting the needs and aspirations of present and future generations (article 2). This concept is particularly relevant for the sustainable management of wildlife as it entails, at a minimum, that countries monitor use, manage resources on a flexible basis, adopt a holistic approach, and base measures on scientific research (Birnie and Boyle, 2002). Interestingly, the CBD does not define "conservation", although it draws a distinction between "in situ" and "ex situ" conservation (see Box 1-3 below). In all events, the legal distinction made by the convention between conservation and sustainable use may be more difficult to apply in practice, as sustainable use may often be part and parcel of conservation efforts (Scholtz, 2005).

Box 1-3: Relevant definitions from the CBD Article 2

"Biological diversity" means the variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.

"Biological resources" includes genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity.

"Ecosystem" means a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit.

"Ex-situ conservation" means the conservation of components of biological diversity outside their natural habitats.

"Habitat" means the place or type of site where an organism or population naturally occurs.

"In-situ conservation" means the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties.

"Protected area" means a geographically defined area which is designated or regulated and managed to achieve specific conservation objectives.

"Sustainable use" means the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations.

Source: www.cbd.int

Parties must pursue biodiversity conservation and sustainable use by adopting specific strategies, plans and programmes and by incorporating relevant concerns into any plans, programmes and policies (article 6). Sustainable use of biodiversity must also be a consideration in national decision-making (article 10(a)). Parties must establish a system of protected areas, rehabilitate and restore degraded ecosystems and promote recovery of threatened species. To this effect, the convention emphasizes the role of national legislation (article 8). The threats to biodiversity are not limited to deliberate killing (e.g., hunting): parties are required to identify and control all potential sources of adverse impacts on biodiversity, and to carry out environmental impact assessments of projects likely to have "significant adverse effects" on biological diversity (article 14). The convention further calls attention to conservation of animals outside their natural habitats ("ex-situ conservation", such as in zoos, parks, etc.), with a view to facilitating recovery and rehabilitation of threatened species and for their reintroduction into their natural habitats under appropriate conditions, while avoiding harm to ecosystems and in-situ populations of species (article 9).

Another salient feature of the CBD is the importance attached to **people**, in particular local and indigenous communities and their relationship with biodiversity (including wildlife). Particularly with reference to sustainable use, the convention calls for cooperation between national authorities and indigenous communities and the private sector. In addition, parties are to protect and encourage the customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements. They must also support local populations to develop and implement remedial action in degraded areas where biological diversity has been reduced (article 10). Finally, the convention has a pivotal role in promoting the respect, preservation and maintenance of traditional knowledge and practices relevant for the conservation and sustainable use of biological diversity (article 8(j)). It calls

upon national governments to ensure communities' prior informed consent¹² and involvement when such knowledge is applied, as well as the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices.

As can be gleaned from the previous paragraph, the CBD is mostly expressed as overall goals, rather than precisely defined obligations, thus allowing a variety of flexible approaches at the national and local level, so long as the goals are achieved. Nonetheless, the innovative features of the convention often require a major reconsideration of the role of national law on wildlife management. Another specific instance in this regard is the CBD requirement for resources conservation to be built around the interests of the individuals, communities and governments concerned in the specific circumstances of the country, as well as the importance of building incentives into conservation and sustainable use objectives (article 11).

1.3.1 Relevant COP Decisions

As is the case of the other international agreements relevant to wildlife, decisions from CBD's COP¹³ have further defined the convention's provisions. The CBD COP adopted Decisions V/6 (2000) and VII/11 (2004), calling on parties to apply an **ecosystem approach**, while not precluding other conservation approaches, be they area-based or species-based. "Ecosystem" in this context is defined as "a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit", without determining the spatial scale of that unit. The ecosystem approach is the preferred framework for action under the convention because it can balance the three objectives of the CBD. It integrates management of land, water and living resources, and it promotes conservation and sustainable use in an equitable way. Furthermore, the ecosystem approach entails a social process: different interested communities must be involved through the development of efficient and effective structures and processes for decision-making and management. The CBD COP formulated guiding principles in this regard, including decentralization, consideration of adjacent and other ecosystems, long-term objectives and integration of use and conservation. These should

¹² This is based on Article 8(j), but explicitly referred to in CBD Decision V/16, Annex on the work programme on the implementation of Article 8(j), general principle 5.

¹³ All COP decisions can be found at www.cbd.int.

be reflected in modern wildlife legislation and could support specific measures for the empowerment of the poor and environmental sustainability.

The CBD **Programme of Work on Protected Areas** adopted by COP 7 (Decision VII/28, 2004) includes a section on "Governance, Participation, Equity and Benefit Sharing" with a view to supporting the adoption of mechanisms to promote equity and benefit-sharing through protected areas management. Parties are encouraged to adopt appropriate governance structures to promote the full participation of local and indigenous communities and share benefits generated by protected areas. The decision suggests establishing policies and institutional mechanisms with full participation of indigenous and local communities, carrying out participatory national reviews, adopting specific legislation and plans to involve communities in the decision-making and management process, ensuring full consultation before any resettlement activity of a community, and engaging communities and relevant stakeholders in participatory planning and governance in full respect of their rights and recognition of their responsibilities. Provisions to improve governance and ensure benefit-sharing can also be effectively incorporated in national legislation on wildlife management.

The CBD COP also adopted **voluntary guidelines on biodiversity-inclusive impact assessment** (Decision VIII/28, 2006). The guidelines aim at incorporating biodiversity considerations into the environmental impact assessment (EIA) procedure, as this may not necessarily result from the general requirement to take environmental issues into account before a project is implemented. Governments need to consider biodiversity criteria when screening projects for EIA, and should make sure that screening guidelines identify the categories of activities that may specifically affect biological diversity. If there is a risk of significant harm to biodiversity, they should apply the precautionary approach. The COP guidelines are also relevant for strategic environmental assessments before policies and programmes are adopted. Activities directly or indirectly affecting legally protected species, threatened species or species protected in respect of migration, breeding or commercial trading, fall under mandatory EIA. Moreover, activities taking place in legally protected areas or their vicinity may also fall under mandatory EIA. An activity that does not fall under mandatory EIA but which may significantly impact biodiversity should also be assessed: this is the case of the introduction of invasive alien species, activities that directly or indirectly affect species not yet legally protected but

threatened or sensitive, extractive species activities (including hunting) and activities leading to reproductive isolation of species or in biologically important areas. For current purposes, this may imply that national environmental legislation should be reviewed to ensure that wildlife management concerns are fully taken into account in EIAs, or to insert relevant provisions to this end in wildlife legislation.

The CBD COP also adopted **Guidelines on Biodiversity and Tourism Development** (Decision VII/14, 2004), which may be relevant in regulating eco-tourism and wildlife-watching. The guidelines target governments and decision-makers in creating a framework for tourism management by ensuring the sustainable use of biodiversity and wide stakeholder involvement in planning and implementation of both existing and new tourism operations. To ensure effective public participation, information gathering and dissemination are crucial and should include economic, social, cultural and environmental conditions or past damages at national and local level, trends within the tourism sector, biodiversity issues, benefit-sharing conditions as well as current national and local development plans and policies. Governments are encouraged to adopt and continuously review national strategies or master plans for sustainable tourism development, thus allowing for adaptive management based on environmental impact assessment, impact management and the precautionary approach. Monitoring also receives particular attention, especially in the long-term, to detect any effects on the ecosystem and areas beyond the immediate project site. The guidelines devote a specific section (paras. 30–33) to the role of legislation, suggesting the development of legal measures for effective law enforcement with the participation of all stakeholders; approval and licensing processes for tourism development and activities; controlling the planning, siting, design and construction of tourism facilities and infrastructure; management of tourism in relation to ecosystems, including vulnerable areas; environmental assessment, including assessment of cumulative impacts and effects on biodiversity, to all proposed tourism developments, and as a tool to develop policies and measure their impacts; integrated land-use management; application of economic instruments; creating incentives for sustainable tourism development; supporting private sector voluntary initiatives consistent with the guidelines; avoiding tourism development or activities outside areas where conservation actions are to take place; and monitoring collection and trade of biological and related cultural resources within tourism sites.

1.3.2 Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity

In the framework of the ecosystem approach, the parties to the CBD have further adopted specific principles and operational guidelines on sustainable use (Decision VII/14: the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity, 2004), which provide guidance to ensure that the use of the components of biodiversity will not lead to the long-term decline of biological diversity. The Addis Ababa Principles and Guidelines aim to generate incentives for conservation because of the social, cultural and economic benefits that people derive from it, and apply to both consumptive and non-consumptive use of biodiversity. Although not legally binding, these guidelines comprise several elements that may inspire national legislators. Applying these elements will require a flexible legal and policy framework – one that can adjust to local realities and specific ecosystems. Indeed, Principle 1 stresses the important role of legislation in ensuring sustainable use. Furthermore, the principles call for the consideration of local customs and traditions when drafting new legislation and regulations, and the development of new supportive incentives measures. Moreover, they underline the need to resolve any overlaps, omissions and contradictions in existing laws and policies, and they highlight the benefits of creating cooperative and supportive linkages between all levels of governance to avoid duplication or inconsistency. The following chapters on design principles for sustainable wildlife management legislation discuss some of the Addis Ababa Principles and their operational guidelines in more detail.

Box 1-4: Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity: an overview of practical principles

Practical principle 1: Supportive policies, laws, and institutions are in place at all levels of governance and there are effective linkages between these levels.

Practical principle 2: Recognizing the need for a governing framework consistent with international and national laws, local users of biodiversity components should be sufficiently empowered and supported by rights to be responsible and accountable for use of the resources concerned.

Practical principle 3: International, national policies, laws and regulations that distort markets which contribute to habitat degradation or otherwise generate perverse incentives that undermine conservation and sustainable use of biodiversity, should be identified and removed or mitigated.

Practical principle 4: Adaptive management should be practiced, based on:

1. Science and traditional and local knowledge;
2. Iterative, timely and transparent feedback derived from monitoring the use, environmental, socio-economic impacts, and the status of the resource being used; and
3. Adjusting management based on timely feedback from the monitoring procedures.

Practical principle 5: Sustainable use management goals and practices should avoid or minimize adverse impacts on ecosystem services, structure and functions as well as other components of ecosystems.

Practical principle 6: Interdisciplinary research into all aspects of the use and conservation of biological diversity should be promoted and supported.

Practical principle 7: The spatial and temporal scale of management should be compatible with the ecological and socio-economic scales of the use and its impact.

Practical principle 8: There should be arrangements for international cooperation where multinational decision-making and coordination are needed.

Practical principle 9: An interdisciplinary, participatory approach should be applied at the appropriate levels of management and governance related to the use.

Practical principle 10: International, national policies should take into account:

1. Current and potential values derived from the use of biological diversity;
2. intrinsic and other non-economic values of biological diversity, and
3. market forces affecting the values and use.

Practical principle 11: Users of biodiversity components should seek to minimize waste and adverse environmental impact and optimize benefits from uses.

Practical principle 12: The needs of indigenous and local communities who live with and are affected by the use and conservation of biological diversity, along with their contributions to its conservation and sustainable use, should be reflected in the equitable distribution of the benefits from the use of those resources.

Practical principle 13: The costs of management and conservation of biological diversity should be internalized within the area of management and reflected in the distribution of the benefits from the use.

Practical principle 14: Education and public awareness programmes on conservation and sustainable use should be implemented and more effective methods of communications should be developed between and among stakeholders and managers.

Source: The full text of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity can be found at www.cbd.int.

1.4 The Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention)

The Aarhus Convention¹⁴ was adopted under the aegis of the UN Economic Commission for Europe. It was signed on 25 June 1998 in Aarhus, Denmark, and entered into force on 30 October 2001. Although regional in scope,¹⁵ the convention is considered global in its significance, namely in the

¹⁴ For the full text of the convention and information about its implementation, see www.unece.org.

¹⁵ The parties to the Aarhus Convention currently are Albania, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, European Community, Finland, France, Georgia, Germany, Greece, Hungary, Italy, Kazakhstan, Kyrgyzstan, Latvia, Netherlands, Norway, Poland, Portugal,

recognition that governments achieve sustainable development only through the involvement of all stakeholders. The global character of the convention is also reflected in its provisions on accession. Any state may become a party to the convention: in the case of states that are not members of the UN Economic Commission for Europe, their accession is subject to the approval of the convention's Meeting of the Parties (article 19).

The convention establishes three sets of rights for the public (through the creation of corresponding international obligations for member countries), which governments should implement through appropriate legislation and regulatory instruments. First, the convention requires public authorities to provide environmental information upon request from the public (article 4), as well as an obligation to collect and disseminate available environmental information to the public proactively (article 5). Second, the convention requires public authorities to establish transparent and fair procedures allowing public participation in environmental decision-making (article 6), including in the preparation of plans and programmes relating to the environment (article 7) or in the drafting of executive regulations and other generally applicable legally binding rules that may have a significant effect on the environment (article 8). Third, the convention requires public authorities to establish procedures guaranteeing public access to justice (a review procedure before a court of law or another independent and impartial body established by law) in case of denial of access to information or public participation or to challenge acts and omissions by private persons and public authorities that contravene provisions of its national law relating to the environment (article 9).

The Aarhus Convention applies to every government body performing duties, activities or services related to the environment and possessing environment-related information, including to bodies dealing with wildlife management. The detailed rules of the Aarhus Convention thus provide useful specifications for the implementation of more general public participation principles supported by the biodiversity-related conventions.

Romania, Slovakia, Slovenia, Spain, Sweden, Tajikistan, the former Yugoslav Republic of Macedonia, Turkmenistan, Ukraine and the UK.

Box 1-5: Relevant definitions of the Aarhus Convention Article 2

"Public authority" means:

- (a) Government at national, regional and other level;
- (b) Natural or legal persons performing public administrative functions under national law, including specific duties, activities or services in relation to the environment;
- (c) Any other natural or legal persons having public responsibilities or functions, or providing public services, in relation to the environment, under the control of a body or person falling within subparagraphs (a) or (b) above;
- (d) The institutions of any regional economic integration organization referred to in Article 17 which is a party to this convention.

This definition does not include bodies or institutions acting in a judicial or legislative capacity.

"Environmental information" means any information in written, visual, aural, electronic or any other material form on:

- (a) The state of elements of the environment, such as air and atmosphere, water, soil, land, landscape and natural sites, biological diversity and its components, including genetically modified organisms, and the interaction among these elements;
- (b) Factors, such as substances, energy, noise and radiation, and activities or measures, including administrative measures, environmental agreements, policies, legislation, plans and programmes, affecting or likely to affect the elements of the environment within the scope of subparagraph (a) above, and cost-benefit and other economic analyses and assumptions used in environmental decision-making;
- (c) The state of human health and safety, conditions of human life, cultural sites and built structures, inasmuch as they are or may be affected by the state of the elements of the environment or, through these elements, by the factors, activities or measures referred to in subparagraph (b) above.

"The public" means one or more natural or legal persons, and, in accordance with national legislation or practice, their associations, organizations or groups.

"The public concerned" means the public affected or likely to be affected by, or having an interest in, the environmental decision-making; for the purposes of this definition, non-governmental organizations promoting environmental protection and meeting any requirements under national law shall be deemed to have an interest.

Source: www.unece.org

1.5 Relevant human rights instruments

Certain implications of international human rights instruments should also be taken into account by national wildlife legislators working toward the legal empowerment of the poor. The **UN Declaration on the Right to Development**, for instance, calls upon national governments to respect the right to development, which implies ensuring the active, free and meaningful participation in development and in the fair distribution of the resulting benefits for the entire population and of all individuals (General Assembly Resolution 41/128, 4 December 1986, article 2).

According to the **International Covenant on Economic, Social and Cultural Rights** (General Assembly Resolution 2200A (XXI), 16 December 1966) and the **International Covenant on Civil and Political Rights** (General Assembly Resolution 2200A (XXI), 16 December 1966), in no case may a people be deprived of its own means of subsistence (article 1 in both Covenants). In addition, the right to culture (Covenant on Economic, Social and Cultural Rights, article 15; Covenant on Civil and Political Rights, article 27) implies that acceptability of measures that affect or interfere with the culturally significant economic activities of a minority depends on the opportunity to participate in the decision-making process and on whether a minority will continue to benefit from its traditional economy (Shelton. 2009).¹⁶

With specific regard to indigenous peoples, the International Labour Organization (ILO) **Convention No. 169 concerning Indigenous and Tribal Peoples in Independent Countries** (Geneva, 27 June 1989)

¹⁶ Shelton's argument was based on *Apirana Mahuika et al v. New Zealand* (Communication No. 547/1992, *Apirana Mahuika et al v. New Zealand*, CCPR/C/70/D/547/1993, views issued on 16 November 2000).

provides useful standards even for those countries that are not parties to the convention,¹⁷ such as:

- consulting indigenous peoples, through appropriate procedures and in particular through their representative institutions, whenever consideration is being given to legislative or administrative measures which may affect them directly (article 6(1)(a));
- establishing means by which these peoples can freely participate, to at least the same extent as other sectors of the population, at all levels of decision-making in bodies responsible for policies and programmes (article 6(1)(b));
- to this end, ensuring that consultations be undertaken in good faith and in a form appropriate to the circumstances, with the objective of achieving agreement or consent to the proposed measures (article 6(2));
- designing projects for the development of the areas indigenous peoples inhabit, so as to promote improvements of the conditions of life and work and levels of health and education of indigenous peoples concerned, with their participation and cooperation (article 7(2));
- ensuring that, whenever appropriate, studies are carried out, in cooperation with the peoples concerned, to assess the social, spiritual, cultural and environmental impact on these peoples of planned activities. The results of these studies must be considered as fundamental criteria for the implementation of such activities (article 7(3));
- obtaining indigenous peoples' free and informed consent if their relocation from the land they occupy is considered necessary, and provide full compensation for any resulting loss or injury (article 16).

Other useful standards can also be drawn from the more recent and widely supported **UN Declaration on the Rights of Indigenous Peoples** (General Assembly Resolution 61/295, 13 September 2007), according to which national governments should:

- obtain the free, prior informed consent of indigenous peoples concerned and agreement on just and fair compensation before forcibly removing them from their lands, possibly providing the option of return (article 10);

¹⁷ The membership of the convention is currently limited to 20 parties (see www.ilo.org).

- respect the right of indigenous peoples' participation in decision-making in matters which would affect their rights, through representatives chosen by themselves in accordance with their own procedures, as well as to maintain and develop their own indigenous decision-making institutions (article 18);
- consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free, prior and informed consent before adopting and implementing legislative or administrative measures that may affect them (article 19).

The international standards and obligations described above have clear implications for the good governance of natural resources, including wildlife, that are connected to the lands or waters traditionally occupied by local and indigenous communities, to their livelihoods and to their traditional, religious or cultural practices. They should inform practical legal mechanisms that may contribute to preventing conflicts and ensuring more successful implementation of wildlife law.

1.6 Guidance from IUCN

National legislators and wildlife managers may find it useful to draw upon the guidelines elaborated by the International Union for Conservation of Nature (IUCN) – an international organization with both governmental and non-governmental members.¹⁸ With regard to wildlife, two specific instruments may be consulted:

- The **IUCN Red List of Threatened Species**, which assesses the conservation status of species, subspecies, varieties and even selected subpopulations on a global scale. The main purpose of the IUCN Red List is to highlight those taxa that are facing a higher risk of global extinction (i.e. those listed as "critically endangered", "endangered" and "vulnerable"). The IUCN Red List also includes information on taxa that are categorized as "extinct" or "extinct in the wild"; on taxa that cannot be evaluated because of insufficient information (i.e. "data deficient"); and on taxa that are either close to meeting the threatened

¹⁸ See www.iucn.org, where the text of all the recommendations of the IUCN World Park Congress mentioned later in the text can be found.

thresholds or that would be threatened were it not for an ongoing taxon-specific conservation programme (i.e. "near threatened").¹⁹

- The **IUCN Protected Area Management Categories**, which aim to increase understanding about the different categories of protected areas.²⁰ The categories are defined by the objectives of management, not by the title of the area or by the effectiveness of management in meeting those objectives. Each category implies a different gradation of human intervention. Countries can use these categories when planning to set up new protected areas and when reviewing existing ones, with a view to meeting objectives consistent with national, local or private goals and needs. The categories defined in 1994 include areas managed mainly for:
 - I. strict protection (strict nature reserve and wilderness area);
 - II. ecosystem conservation and protection (i.e. national park);
 - III. conservation of natural features (i.e. natural monument);
 - IV. conservation through active management (i.e. habitat/species management area);
 - V. landscape/seascape conservation and recreation (i.e. protected landscape/seascape);
 - VI. sustainable use of natural resources (i.e. managed resource protected area).²¹

Along with the management categories, IUCN has recognized the need for different governance types. It has thus identified four main types, depending on the responsible managers:

- government-managed protected areas (at various levels);
- co-managed protected areas (in various forms and including transboundary protected areas);
- private protected areas (for profit and not for profit);
- community conserved areas (including areas conserved by indigenous peoples) (IUCN World Park Congress (WPC) Recommendation V.17).

In addition, the WPC explicitly recognized that "protected areas should strive to contribute to poverty reduction at the local level, and at the very minimum must not contribute to or exacerbate poverty" (WPC Recommendations V.29).

¹⁹ See www.iucnredlist.org.

²⁰ See www.iucn.org.

²¹ The guidelines for applying protected area management categories are currently under revision, available at www.parksnet.org.

Other resolutions and recommendations adopted in the context of IUCN address wildlife management issues. With regards to **humane trapping standards**, the IUCN World Conservation Congress declared that conservation and sustainable use imply a sense of caring for the welfare of wild animals that are killed or captured (World Conservation Congress 2004, Recommendation 3.089). The congress unequivocally condemned the killing of animals in small enclosures where they have little or no chance of escape or where they do not exist as free-ranging (so-called, "**canned hunting**"). Southern African agencies in particular were thus required to protect wild animals from methods of hunting, trapping, and fishing that cause extreme, prolonged or avoidable suffering (World Conservation Congress 2004, Recommendation 3.093).

With regards to **human-wildlife conflicts**, governments and conservation authorities at local, national, and international levels have been encouraged to recognize the pressing need to alleviate these conflicts, to prioritise management decisions, to undertake planning and action for preventing and mitigating human-wildlife conflict, and to incorporate global, regional and local mechanisms to ensure that these issues are properly addressed; and to designate and allocate adequate financial resources for supporting programmes targeted at prevention and mitigation of human-wildlife conflicts (WPC Recommendation V.20, 2003).

During the IUCN World Conservation Congress in October 2008, 27 organisations (that have become over 40 at the time of writing) formed a Global Coalition and launched the **Global Sustainable Tourism Criteria** – a set of guidelines for sustainable practices in the tourism industry.²² The fourth criterion (maximize benefits to the environment and minimize negative impacts) specifically refers to wildlife and requires that use is sustainable, regulated and appropriately assessed so as to avoid adverse effects on wildlife populations. Wildlife species are expected to be harvested from the wild, consumed, displayed, sold or internationally traded, as part of a regulated activity that ensures sustainability (para. D.3.1). Businesses should not hold captive wildlife, except for properly regulated activities, and living specimens of protected wildlife species should only be kept by those authorized and suitably equipped to house and care for them (para. D.3.2). Tourism enterprises should use native species for landscaping and restoration, and avoid the introduction of invasive alien species

²² See www.sustainabletourismcriteria.org.

(para. D.3.3). Interactions with wildlife must not reduce the viability of populations in the wild. Any disturbance of natural ecosystems should be minimized, rehabilitated, and mitigated through a compensatory contribution to conservation management (para. D.3.5).

1.7 The European Union (EU) and wildlife law²³

EU environmental legislation deserves a closer examination, as it requires a timely and effective integration of its rules into national legislation by EU member states. In the treaties establishing the European Union, member states²⁴ have subscribed either to the direct application of legislation issued by the EU, or to take adequate action to implement it. The existence of a judicial system able to impose financial penalties for lack of implementation or enforcement, to which all member states are subject, strengthens the obligations that derive from EU legislation.

As a consequence, EU environmental rules have had an outstanding impact on the legal systems of member countries. In the case of the least progressive members, their legal reforms for environmental protection and sustainable natural resource management have been largely the consequence of the EU initiatives. At the same time, the examples set by more progressive member states have encouraged the EU to strengthen the legislation of all member countries. EU environmental legislation has also led to stronger legislation of non-member countries, as for various reasons (requirements of the pre-accession phase, participation in funding programmes to which they may be entitled, etc.) a process of "approximation" of their legislation with that of the EU is underway.²⁵

The legislation adopted by the EU concerning nature conservation thus far has limited its scope to specific aspects – mainly protection of species and

²³ This section draws from Chapter 2.3 of Cirelli, M.T. 2002. *Legal trends in wildlife management*. FAO Legislative Study, No. 74. Rome, Italy.

²⁴ Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and United Kingdom.

²⁵ Indeed, countries that have concluded an Association Agreement with the EU are often called upon to approximate their national legislation (particularly on natural resources management) to that of the European Union. See Marin Duran G. and Morgera, E. 2006. Towards Environmental Integration in EC External Relations? A Comparative Analysis of Selected Association Agreements. *Yearbook of European Environmental Law* 6 : 179–210.

habitats of particular interest – although recent initiatives have extended to other forms of sustainable use of wildlife and nature conservation, adopting a more integrated approach. Generally, the EU has been silent on issues such as tenurial arrangements over wildlife, accessibility of private lands for hunting (except as regards prohibited species and methods) and size of holdings.

The EU generally uses two legal instruments to address environmental issues: directives and regulations. Directives are most frequently used as they allow member states to decide the form and means of implementation, as long as the common objective is reached. Regulations in turn are directly applicable to member states, but member states may still adopt stricter rules. When it comes to nature conservation, the most significant ones are Council Directive 79/409/EEC of 2 April 1979, as amended, on the conservation of wild birds, known as the Birds Directive, and Council Directive 92/43/EEC of 21 May 1992, as amended, on the conservation of natural habitats and of wild fauna and flora, known as the Habitats Directive. These two instruments create an interrelated system for biodiversity conservation based on the setting up of a network of protected sites. In addition, the discussion below also briefly addresses EU regulations implementing CITES.

1.7.1 The Birds Directive

The Birds Directive²⁶ relates to the conservation of all naturally occurring wild birds within the member states. The directive requires member states to maintain or adapt the population of these species at a level which corresponds to ecological, scientific and cultural requirements, while taking account of economic and recreational requirements (article 2). Species listed in Annex I must be the subject of special conservation measures concerning their habitats, to ensure their survival and reproduction. Members must take account of species in danger of extinction, or vulnerable to habitat changes, or rare, or otherwise requiring particular attention because of their habitat's nature. Members must classify the most suitable territories in number and size for the conservation of these species as **special protection areas** (article 4(1)). Similar measures must be taken for regularly occurring migratory species not listed in Annex I as regards their breeding, moulting and wintering areas and staging posts along their migration routes (article 4(2)).

²⁶ The text of the directive can be found at eur-lex.europa.eu.

A specific regime is set out for derogations from the provisions of the Directive, in specified cases, relating mainly to public health and security, protection of fauna and flora and scientific purposes. These derogations are admissible only "where there is no other satisfactory solution". Derogations thus authorised by member states must specify all applicable conditions, i.e. concerned species, means, circumstances of time and place, and responsible authorities (article 9).

Article 7 of the directive allows **hunting** for species that are listed in Annex II, subject to limitations to ensure the viability of the species through a sustainable management system. Hunting should be practiced in a way that ensures a favourable conservation status and wise use. A general prohibition of hunting applies to all species of wild birds during the rearing periods and the various stages of reproduction and, in the case of migratory species, during pre-mating migration and during their return to their rearing grounds. States should forbid methods for the large-scale or non-selective capture or killing of birds and methods that may cause the local disappearance of a species (article 8). Member states are allowed to apply derogations from provisions concerning marketing and hunting, but this possibility is subject to certain conditions that need to be examined on a case-by-case basis. To facilitate member states' compliance, the European Commission (the executive arm of the EU) published in 2004 a "Guide on Hunting under the Birds Directive", which was updated in 2007.²⁷

1.7.2 The Habitats Directive

The Habitats Directive²⁸ is the most comprehensive legislative instrument adopted by the EU regarding wildlife. Its main aim is "to promote the maintenance of biodiversity, taking account of economic, social, cultural and regional requirements" (preamble). The directive provides for the designation of special areas of conservation to ensure the restoration or maintenance of natural habitats and species of EU interest (respectively listed in Annexes I and II) at a favourable conservation status, with a view to creating a coherent European ecological network, named "Natura 2000". In the case of species ranging over wide areas, sites to be proposed correspond to the places within the natural range of such species that present the physical or biological factors essential to their life and reproduction (article 4).

²⁷ See ec.europa.eu.

²⁸ The text of the directive is available at eur-lex.europa.eu.

On the basis of criteria set out in Annex III of the directive, the European Commission establishes a draft list of sites of EU importance in agreement with member states. The list identifies sites that host one or more priority natural habitat types or priority species, pursuant to a specified procedure (set out in article 21), which involves the assistance of a committee made up of representatives of member states (article 5(2)). Member states must designate such sites as special areas of conservation (article 4(4)) and establish the necessary conservation measures, including management plans (which may be specific or integrated into other land use plans), as may be appropriate (article 6(1)).

Natura 2000 is to include also the special protection areas classified by member states under the Birds Directive (article 3(1)), which are part of the network from the moment of their designation, and are not subject to the same procedure for declaration as special areas of conservation envisaged in the Habitats Directive.

Any plan or project not directly connected with the management of a site but likely to have a significant impact on it, either individually or in combination with others, is subject to an assessment. The competent authorities may agree to the plan or project only upon verification that it will not affect the integrity of the site. If, in spite of a negative assessment and the absence of alternatives, a plan or project must be carried out for reasons of overriding public interest, including those of a social or economic nature, the member state must take all compensatory measures necessary to protect the overall coherence of Natura 2000, informing the European Commission of the measures adopted. Where the site hosts a priority natural habitat type and/or species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion of the European Commission, to other imperative reasons of overriding public interest (article 6(2)–(4)). Arrangements are made for co-financing by the EU of action to be taken by states in relation to special areas of conservation hosting priority habitat types and/or priority species (article 8).

Member states also must protect features of the landscape that are of major importance for wildlife, such as those which may be essential for migration, dispersal or genetic exchange, with a view to improving the ecological coherence of the Natura 2000 network (article 10). Member states are further

required to monitor the conservation status of natural habitats and species of EU interest and particularly priority ones (article 11).

The directive includes provisions for the protection of specific listed species of animals and plants. Member states must prohibit capture or killing of these species, as well as disturbance, destruction of eggs, of breeding sites and of resting places, and keeping and sale of wild specimens (article 12).

The directive has numerous positive aspects and implications. When it was adopted, its objective was innovative in aiming to integrate the "maintenance of biodiversity" with economic, social, cultural and regional requirements. The directive also has a wide scope of application as it covers not only entirely natural areas but also significant areas in which human action and natural processes have interacted ("semi-natural habitats"). Natura 2000 sites are thus intended as sites where land use planning incorporates both nature conservation and development objectives (Cirelli, 2002).

Another positive effect of the directive has been to encourage states to adopt formal management plans for sites to be protected, although some member states have concerns about integrating these plans with other existing or future management plans (e.g. forestry plans, hunting plans, etc.). Standard requirements for data collection throughout the EU enhance the significance of these plans for rational wildlife management. Such requirements, further specified in subsequent implementing legislation²⁹ and consistently enforced by the Court of Justice, have promoted an unprecedented uniform gathering of environmental information relevant to species and sites of Union interest. The European Clearing House Mechanism (CHM),³⁰ created in 2001 and managed by the European Environment Agency, collects and disseminates information on biodiversity across the European Union. The CHM aims to provide scientific and technical guidance to decision-makers for the implementation of the CBD objectives along with improving public awareness of biodiversity issues.

Measures to be adopted by member states within each selected area are discretionary, subject to the general requirement to maintain species and habitats at a favourable conservation status. The flexibility allows

²⁹ Commission Decision 97/266/EC of 18 December 1996 concerning a site information format for proposed Natura 2000 sites.

³⁰ See biodiversity-chm.eea.europa.eu.

management to be adapted to local requirements, in light also of economic and social concerns. The directive acknowledges that the maintenance of biodiversity "may in certain cases require the maintenance, or indeed the encouragement, of human activities" (preamble), and there are no such activities which are unconditionally prohibited. The identification of specific prohibitions is left to a case-by-case determination of the states. Notwithstanding the positive effects of the directive, numerous cases have been and continue to be brought before the Court of Justice in which member states have exceeded their margin of discretion and frustrated the objectives of the directive.³¹

1.7.3 CITES Regulation

CITES has been implemented by the European Union as a whole,³² rather than by every individual member state so as to ensure uniformity of restrictions on trade within the region. The so-called "Wildlife Trade Regulations" (Basic Regulation 338/97, Implementing Regulation 338/97³³ and successive regulations to update the European system in light of CITES COP decisions)³⁴ are in some ways stricter than CITES. A higher number of species may be listed under Annex A (the equivalent of Appendix I of CITES), for which commercial trade is prohibited. An additional annex – Annex D – is also included within the EU legal framework, according to which trade of listed species is monitored to detect conservation issues in advance. Moreover, the European Commission has the power to restrict trade of some species even if their trade is allowed under CITES. Furthermore, the EU Trade Regulations contain rules relating to the wellbeing of the wild animals such as their housing conditions and their transportation.

³¹ See *Nature and Biodiversity Cases - Ruling of the European Court of Justice*, available at ec.europa.eu.

³² See ec.europa.eu.

³³ Amended by Commission Regulation (EC) No 100/2008 of 4 February 2008. It lays down the different forms for all the permits, notifications and certificates, as well as the labels that are needed in specific cases.

³⁴ Regulation (EC) No 407/2009. Specific categories include 'hybrids' (where one of the parents is listed in one of the annexes or where parents are listed in different annexes) in which case the more restrictive action is adopted.

As the European Commission remains centrally responsible for the implementation of CITES in the Community, the Basic Regulation establishes the following bodies at the EU level:

- the Committee on Trade in Wild Fauna and Flora, which is charged with approving the implementing measures to be adopted by the commission;
- the Scientific Review Group, which responds to any scientific questions arising;
- the Enforcement Group, which is composed of representatives of the customs, police services and environmental inspectorates of each member state and is responsible for dealing with any technical implementation issues.

Equivalent bodies (a management authority, a scientific authority and a customs office) should be established at member state level, made responsible for the application of the trade regulations within their territory, and adequately staffed and appropriately trained.

In the case the specimen is coming from outside the European Union, the management authority of the importing state must issue an import permit that can last up to twelve months as well as verify the export permit or certificate of the exporting country (valid up to six months). The purpose for the import must be examined carefully to avoid any detrimental conservation effects. For live species, appropriate housing facilities should be arranged in advance and transportation of the specimens must comply with relative legislation, avoid any harm and minimise any such risk of damage (Regulation No. 1/2005 of 22 December 2004 on the protection of animals during transport and related operations; and Regulation 338/97, article 9).

Finally, Regulation 338/97 also provides rules on enforcement. A system of monitoring and information exchange is established between the different national authorities as well as between the competent authorities and the European Commission, based on a reporting system. Particular attention is paid to increasing public awareness on the rules of illegal wildlife trade. Further to that, each member state should adopt national action plans with penalties to detect and sanction any illegal wildlife trading. The "Study on the Enforcement of the EU Wildlife Trade Regulations in the EU-25"³⁵,

³⁵ European Commission. 2006, Study on the Enforcement of the EU Wildlife Trade Regulations in the EU-25, available at ec.europa.eu.

however, suggests that member states should adopt stronger sanctions to better implement the regulations.

1.8 Regional instruments

This section will provide an overview of regional agreements that are related or specific to wildlife management, which should be taken into account by policy-makers and legal drafters when discussing reforms of national wildlife legislation in a specific region. In some instances, regional agreements may provide detailed standards on how to frame wildlife regulation at the national level.

1.8.1 European instruments

This section will now turn to regional agreements in Europe, outside the framework of the EU. The **Convention on the Conservation of European Wildlife and Natural Habitats** (Bern, 1979 – called Bern Convention)³⁶ came into force in 1982.³⁷ Its main objective is to create a system for the protection and conservation of wild animals and plants listed within the appendices of the convention and their surrounding environment. To achieve this, the convention intends to promote cooperation between the parties, especially when it comes to migratory species listed within the appendices. Parties are expected to adopt national policies for the conservation of the species, integrate protection measures into other developmental policies and increase public awareness and information gathering on the conservation of animal and plant species (article 3). Parties are further to adopt legislative and administrative measures to ensure the conservation of habitats and fauna species (articles 4–7). Appendix II deals particularly with animal species. Any capture, killing, destruction of eggs or disturbance during periods of breeding, rearing and hibernation of listed wild animals is prohibited. Appendix III deals with species whose exploitation must be regulated to avoid their disappearance or serious disturbance.

The **European Charter on Hunting and Biodiversity** was drafted under the auspices of the Bern Convention as a non-binding instrument that addresses both regulators and managers, and hunters and hunting tour

³⁶ The text of the convention can be found at conventions.coe.int. The convention has 50 parties, including Eastern and Western European countries and some African countries.

³⁷ Information on the membership of the convention can be found at: conventions.coe.int.

operators. It was adopted by the Standing Committee to the Bern Convention in November 2007, with the recommendations that parties to the convention make reference to the charter in the elaboration and implementation of their hunting policies. The charter includes a set of principles and good practices to achieve sustainable hunting. *Sustainable hunting* is defined as the use of wild game species and their habitats in a way and at a rate that does not lead to the long-term decline of biodiversity or hinder its restoration, arguing that it can positively contribute to the conservation of wild populations and their habitats and also benefit society. It builds upon the idea that hunters can contribute towards the conservation of wildlife and biodiversity in general. The charter distinguishes between resident hunting – an activity conducted by hunters within their country of residence, and most commonly in the area where they physically reside and have hunting rights – and hunting tourism – an activity conducted by foreign hunters who travel abroad to hunt and/or own hunting grounds abroad. With regards to the latter, it suggests promoting forms of hunting tourism that provide local communities with socio-economic incentives.

The charter recommends that management plans and/or measures have clear objectives that take into account the behaviour and ecology (including predation and seasonal effects) and the long-term conservation status of wild species, with provisions to ensure proper implementation, monitoring and updating. Management plans should address harvest both by resident hunters and hunting tourists and should be developed in cooperation with hunters to apply simple and effective monitoring and management of populations, habitats and ecosystem services. Legislation should encourage harvest that provides socio-economic benefits to local stakeholders and communities, and should set official fees or taxes at reasonable levels so that these do not represent barriers to local participation. The charter suggests facilitating the empowerment and accountability of local stakeholders, especially hunters, in decentralised processes, and promotes models that ensure equitable sharing of benefits among user groups. It encourages education and training for hunters, and recommends cooperation with hunters' organisations that engage with all participants, including recruitment from both genders, all ages and backgrounds. Overall, policies should be clear, transparent and adaptive. Hunters are encouraged to contribute to research, management and monitoring, recognize the importance of wildlife conservation and acquire all the necessary knowledge on how to apply best hunting techniques by minimising any detrimental effects on biodiversity.

1.8.2 African instruments

Several regional agreements in Africa have direct or indirect relevance for wildlife management, and should be taken into account by legal drafters in the countries that are parties to them. The present section maps out relevant African agreements, starting from the broadest in geographical scope.³⁸

The **African Convention on the Conservation of Nature and Natural Resources** was originally concluded in 1968 in Algiers and was then revised in Maputo in 2003 by the Assembly of the African Union.³⁹ The revised convention⁴⁰ has been ratified by eight countries⁴¹ at the time of writing and will enter into force upon ratification by fifteen countries.

The overall objective of the revised convention is the conservation and management of animal and plant species and their environment (article IX). To conserve animals and particularly threatened ones, parties must adopt policies and management measures for the sustainable use and the conservation of those species *in situ* and *ex situ*. Continued scientific research and monitoring will guide management of the species and their environment. Parties must identify threatened or migratory species together with important areas for their survival. They must assure sustainable use of wildlife through regulation of hunting seasons or means of capture (article IX). Parties must identify and deal with the factors that are causing wildlife depletion and must adopt specific protection measures to avoid further depletion (article X). They must take appropriate steps to reduce and eliminate illegal trade in wild fauna (article XI) and must designate conservation areas according to the potential impacts and necessity (article XI).

³⁸ This section draws from Cirelli, MT. and Morgera, E. 2009. *Wildlife law and the legal empowerment of the poor in Sub-sabaran Africa: additional case studies*, FAO Legal Paper Online No 79.

³⁹ At the time of writing, the original convention has been ratified by 26 states (Algeria, Burkina Faso, Cameroon, Central African Republic, Côte d'Ivoire, Comoros, the Democratic Republic of Congo, Djibouti, Egypt, Gabon, Ghana, Kenya, Liberia, Madagascar, Mali, Nigeria, Niger, Rwanda, Senegal, Sudan, Swaziland, Tanzania, Zambia, Uganda, Tunisia, and Togo) and signed by Burundi, Chad, Ethiopia, Gambia, Guinea, Libya, Lesotho, Mauritania, Mauritius, Sierra Leone and Somalia.

⁴⁰ The full text is available at www.ecolex.org.

⁴¹ Burundi, Comoros, Ghana, Libya, Lesotho, Mali, Niger and Rwanda.

The **Agreement establishing the Common Market for Eastern and Southern Africa (COMESA)**⁴² was signed in November 1993 in Kampala and entered into force on 8 December 1994.⁴³ COMESA is one of the pillars of the African Economic Community and regulates trading within the state parties. Interestingly, the agreement devotes one article to wildlife development and management, according to which states undertake to develop a collective and coordinated approach to sustainable development and management rational exploitation and utilisation and the protection of wildlife in the Common Market. In particular, they are expected to exchange relevant information, adopt common policies against poaching, use income from wildlife for the benefit of national parks and nearby areas, establish wildlife ranches, encourage breeding research programmes on disease resistance, and adopt a uniform trophy pricing system to regulate hunting (article 126).

The **Southern African Development Community (SADC)**⁴⁴ promotes and coordinates development projects within the region. The constitutive Treaty (adopted in Windhoek in 1992 and entered into force in 1993) includes a general provision for the sustainable use of natural resources (article 5). SADC countries are expected to cooperate in the field of natural resources and the environment to foster regional development and integration (article 21). SADC countries have been particularly active in the field of sustainable wildlife management, and have adopted a **Protocol on Wildlife Conservation and Law Enforcement** in Maputo in 1999. The protocol entered into force in November 2003. It affirms the sovereign right of states over natural resources and creates a framework for regional wildlife management (preamble and article 1). States must control activities within their territory so as not to cause any damage to wildlife (article 3). To promote the sustainable use of wildlife, the protocol aims to facilitate harmonisation of the relevant wildlife laws and management practices, their enforcement, the exchange of information and the establishment of transboundary conservation areas (article 4).

Cooperation and collaboration between the different stakeholders at a national level but also between states to achieve international objectives

⁴² The text of the treaty is available at about.comesa.int.

⁴³ It currently has 19 members (Burundi, Comoros, Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia and Zimbabwe).

⁴⁴ See www.sadc.int, where the full text of the treaty and its protocols can be found.

relative to wildlife is emphasized (article 3). The protocol requires the establishment of specific institutions to facilitate cooperation and enforcement. A Wildlife Sector Technical Coordinating Unit composed of the food, agriculture and natural resources ministers of the member states is to meet once a year. A committee of ministers will be responsible for adopting regional wildlife policies and strategies and supervise the implementation of the protocol. A committee of senior officials, comprising responsible ministry members for wildlife, will monitor and assess the implementation of the protocol. A Wildlife Sector Technical Committee will act as the secretariat for the protocol in supervising and coordinating the implementation (article 5).

The protocol further requires states to adopt measures for the protection, taking and trading of wildlife, incentives to promote wildlife conservation as well as appropriate sanctions and to enforce the relevant instruments (article 6). They must integrate into their national development plans, management programmes for the conservation and sustainable use of wildlife (article 7). They must monitor the maintenance of the populations, prevent over-exploitation, restrict trade and control activities that may affect wildlife. The protocol encourages the participation of multiple stakeholders in the process; the states must adopt programmes to promote cooperative management of wildlife resources at international, national and community-based levels. States must use economic and social incentives to encourage conservation and sustainable use. States must also adopt programmes for education, increase of public awareness and research (article 7). The parties will form a public regional database including information on wildlife status and management (article 8).

Furthermore, to ensure effective enforcement of wildlife conservation and sustainable use laws, states must ensure that adequate financial and human resources are available (article 9). In a transboundary context, states must cooperate and exchange relevant information to eliminate and prevent illegal trade and illegal taking of wildlife products (article 9). States must adopt training programmes of current and indigenous wildlife management practices with a view to reinforcing capacity for wildlife management needs (article 10). The parties will establish a Wildlife Conservation Fund to finance the programmes and projects related to the protocol (article 11).

The protocol provides for sanctions against any state that fails to fulfil its obligations in a persistent way or that undermines the principles and

objectives of the protocol by adopting conflicting policies (article 12). The Tribunal of the South African Development Commission is designated to settle any arising disputes (article 13).

The Lusaka Agreement on cooperative enforcement operations directed at illegal trade in wild fauna and flora⁴⁵ was adopted in September 1994 and came into force in December 1996.⁴⁶ It was initiated to help national law enforcement agencies stop illegal trade in wild flora and fauna. To achieve this, it establishes a regional institutional framework to assist in wildlife law enforcement and implementation. The agreement establishes a task force as an international legal entity charged with information collection and sharing, as well as with investigating infringements (article 5). It also creates the Governing Council consisting of delegates of the states responsible for determining the task force's agenda (article 7). States are required to investigate illegal trade and should return to the country of origin any specimen that was subjected to illegal trade. States are also tasked with collecting information and transmitting it to the Task Force as well as assisting it on technical matters to ensure the effective cooperation of the agreement (article 4). To this end, every party must designate a national bureau (article 6). The Governing Council or an arbitral body will deal with any disputes arising (article 10).

The **Protocol concerning Protected Areas and Wild Fauna and Flora in the Eastern African Region**⁴⁷ was signed in Nairobi in 1985 and entered in force in 1996.⁴⁸ The protocol requires the development of national strategies to coordinate the protection and preservation of fragile ecosystems (article 2). Parties agree to prohibit the capture, killing, keeping and trading of animals listed in Annex II of the protocol, as well as to avoid any kind of disturbance to the environment of the species, especially during breeding, rearing or hibernation periods, or any taking of their eggs (article 4). Protection for species listed under Annex III of the protocol is limited to ensuring the maintenance and restoration of the population through the adoption of management plans for their capture, killing and trading

⁴⁵ See www.lusakaagreement.org.

⁴⁶ Congo (Brazzaville), Kenya, Tanzania, Uganda, Zambia and Lesotho ratified it. South Africa, Ethiopia and Swaziland are signatories.

⁴⁷ See www.unep.org.

⁴⁸ Comoros, La Reunion (France), Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Somalia, Tanzania and South Africa are the current parties.

(article 5). Parties also agree to ensure special protection for migratory species listed in Annex IV of the protocol.

Finally, the protocol requires the establishment of protection areas according to some criteria enumerated within the protocol and which concentrate on the importance of the areas to the species. States should designate areas to maintain the greatest number of fauna and flora populations possible; to protect ecological and biological processes essential to the functioning of the Eastern African region; and to protect representative ecosystem samples and areas of particular scientific, aesthetic, cultural or educational importance. Natural habitats critical for threatened or endemic species of fauna and flora, migration routes, fragile ecosystems and areas of scientific interest should be taken into account in establishing protected areas (article 8).

The parties together are required to adopt guidelines for the identification and management of such areas (article 9). Individually, the parties must plan for and manage the protected areas, prohibiting the destruction of animals, regulating trade in wildlife and otherwise safeguarding the ecological processes in the areas (article 10). States may also designate buffer zones where activities are less restricted provided that the protection area purposes are respected (article 11). Exemptions to the objectives should not endanger the maintenance of the ecosystems or the survival of the species although indigenous practices must be taken into account by states (article 12).

States should endeavour to establish transfrontier protected areas and try to work together with non-party states to the convention (article 13). The protocol also contains some measures to increase public awareness and participation. To this end, states are encouraged to publicise the establishment of protected areas (article 14) and the importance of the conservation of protected areas (article 15). They must further exchange information (article 18) and coordinate research programmes (article 17) with a view to establishing and extending the network of protected areas around the region (article 16).

1.8.3 Latin American agreements

This section will in turn briefly review wildlife-related regional agreements in Latin America.⁴⁹ The **Convention for the Conservation and Management of the Vicuña** (Lima, 1979)⁵⁰ provides a good example of multilateral cooperation for the sustainable management of a single species. Within this framework, Argentina, Chile, Peru, Bolivia and Ecuador set an important precedent in achieving sustainable management through the adoption of national action plans for vicuña management. The Vicuña Convention establishes an obligation for parties to prohibit all hunting and trade in vicuña products, except in cases closely monitored by the state and approved as sustainable practices within the Vicuña Convention. Its effectiveness, however, relies on CITES to ensure global cooperation for the implementation of management decisions taken by the parties. The global membership of CITES ensures that all international trade in vicuña products takes place in harmony with the Vicuña Convention.

Regional agreements relating to biodiversity also include the **Amazon Cooperation Treaty** (Brasília, 1978), which created a cooperation and political mechanism aiming to harmonize regional policies with the objective of conservation and sustainable use of biodiversity in eight Amazon countries (Bolivia, Brazil, Colombia, Ecuador, Guyana, Suriname, Peru and Venezuela). It includes a 2004 strategic plan with a programmatic area focusing on biological diversity, biotechnology and biotrade.

The countries belonging to the Andean Community of Nations (CAN) also approved in 2002 a **Regional Biodiversity Strategy for the Tropical Andean Countries** (CAN Decision 523) with the objective of identifying joint, prioritized actions for the conservation and sustainable use of the elements of biological diversity, specifically referring to the *in situ* and *ex situ* conservation of wildlife in areas where Andean countries have comparative advantages.

Under the **Convention for the Conservation of the Biodiversity and the Protection of Wilderness Areas in Central America** (Managua, 1992),⁵¹

⁴⁹ This section draws from Aguilar, S. and Morgera, E. 2009. *Wildlife law and the legal empowerment of the poor in Latin America*, FAO Legal Paper Online No. 80.

⁵⁰ Full text available at www.ecolex.org.

⁵¹ The convention parties are Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama.

parties undertake to formulate national strategies and programmes and the creation of economic measures (articles 12–13), to establish national legislation for the conservation and sustainable development of biodiversity (article 16), to strengthen biodiversity conservation by in-situ and ex-situ measures and by control or elimination of alien species (articles 24 and 27), to broaden eco-tourism taking into account its economic potential in support of protected areas as well as neighbouring populations (article 28) and to enhance public participation in relation to measures for the conservation and sustainable use of biodiversity by means of education (article 35). The Central American Council for Protected Areas, in cooperation with national bodies, is to form a biological corridor of Central America by maintaining existing and creating new protected areas (articles 17–19).

1.8.4 Instruments in Asia and Oceania

Among regional wildlife-related treaties and initiatives in Asia and Oceania,⁵² the South Pacific Regional Environment Programme (SPREP),⁵³ the Convention on Conservation of Nature in the South Pacific, and the Agreement on the Convention of Nature and Natural Resources of the Association of Southeast Asian Nations (ASEAN)⁵⁴ can be singled out.

The **Agreement establishing the South Pacific Regional Environment Programme** (Apia, 1993) established SPREP as an intergovernmental organization with the objectives to: promote cooperation and coordination in the South Pacific region. It provides assistance in order to protect and improve the environment and to ensure sustainable development through an action plan adopted from time to time. The action plan includes monitoring and assessment of the state of the environment in the region, including the impacts of human activities on the ecosystems; promotion and development of programmes, including research programmes, to protect terrestrial, freshwater, coastal and marine ecosystems and species, while ensuring ecologically sustainable utilization of resources; and promotion of integrated legal, planning and management mechanisms (article 2).⁵⁵

⁵² This section draws from Tsioumani, E. and Morgera, E. 2010. *Wildlife law and the legal empowerment of the poor in Asia and Oceania*, FAO Legal Paper Online No. 83.

⁵³ See www.sprep.org.

⁵⁴ See www.aseansec.org.

⁵⁵ The agreement counts 18 parties (Australia, Cook Islands, Fiji, France, Kiribati, Marshall Islands, Micronesia, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Samoa, Solomon

The **Convention on Conservation of Nature in the South Pacific** (Apia, 1976 – called the Apia Convention) established a broad framework for nature conservation in the South Pacific region, particularly in relation to migratory and endangered species and the preservation and management of wildlife habitat and terrestrial ecosystems. It includes provisions on the establishment of protected areas (article 2). It calls on parties to prohibit hunting and commercial exploitation of species in national parks (article 3) and to maintain lists of indigenous fauna and flora in risk of extinction for their full protection (article 5). It further notes that provision may be made as appropriate for customary use of areas and species in accordance with traditional cultural practices (article 6).⁵⁶

The **ASEAN Agreement on the Conservation of Nature and Natural Resources** (Kuala Lumpur, 1985) has the objectives of maintaining essential ecological processes and life-support systems, preserving genetic diversity and ensuring the sustainable utilization of harvested natural resources (article 1(1)). It provides for species and ecosystem conservation through extensive management measures, including species sustainable use (article 4) and for environmental planning measures with a view to integrating natural resource conservation into the land use process, including by the establishment of protected areas (article 13) and impact assessments (article 14). It also addresses public participation in planning and implementation of conservation measures (article 16).⁵⁷

The **Agreement on the Establishment of the ASEAN Centre for Biodiversity** (Bangkok, 2005) establishes the Centre to facilitate cooperation and coordination among ASEAN members and with relevant governments and international organizations, on the conservation and sustainable use of biological diversity and the fair and equitable sharing of benefits arising from the use of such biodiversity in the region (article 2).⁵⁸

Islands, Tonga, Tuvalu, USA and Vanuatu – see www.ecolex.org), and SPREP has 25 member countries (see www.sprep.org).

⁵⁶ As of April 2008, the Apia Convention has five parties: Australia, Cook Islands, Fiji, France and Samoa.

⁵⁷ Ratified by the Philippines, Cambodia, Indonesia, Lao PDR, Myanmar and Thailand, but not yet in force.

⁵⁸ The agreement was ratified by Brunei Darussalam, Lao PDR, Philippines, Singapore and Viet Nam.

1.8.5 An inter-regional initiative: the Agreement on International Humane Trapping Standards

The Agreement on International Humane Trapping Standards was signed by the European Community (now European Union), Canada and the Russian Federation in 1997. The US signed it in 1998. It concentrates on the trapping of wild terrestrial or semi-aquatic mammals listed in Annex I for wildlife management purposes, including pest control; for obtaining fur, skin or meat; and for the capture of mammals for conservation (article 3). The agreement defined "traps" as both killing and restraining mechanical capturing devices, as appropriate, and "trapping methods" as traps and their setting conditions, including target species, positioning, lure, bait and natural environmental conditions (article 3).

Each party has to establish appropriate processes for certifying traps in accordance with the standards, prohibit the use of restraining and killing traps that are not certified in accordance with the standards, require manufacturers to attach a mark to identify certified traps and ensure compliance with these trapping standards.

The agreement calls upon each party to take the necessary steps to ensure that its respective competent authorities establish appropriate processes for certifying traps in accordance with the standards, prohibit the use of traps that are not certified, require manufacturers to identify certified traps, and provide instructions for their appropriate setting, safe operation and maintenance (article 7). Each competent authority is expected to grant or remove permission for the use of traps, enforce legislation on humane trapping methods and ensure that trappers are trained in the humane, safe and effective use of trapping methods, including new methods as these are developed (article 8). Derogations are envisaged for traditional wooden traps essential for preserving cultural heritage of indigenous communities, subject to written conditions to be determined on a case-by-case basis by competent authorities (article 10).

1.9 Concluding remarks

The international obligations and standards illustrated in this chapter are either applicable to specific wildlife species or their habitats, or contribute to a holistic concept of sustainable wildlife management as part of each country's efforts to preserve biodiversity and ensure the sustainable use of its

components. Some obligations pose significant limits to the sovereignty of countries in regulating wildlife use and conservation (as in the case of CITES and CMS Appendix-I listed species), so state parties have limited flexibility in translating them into national legislation, unless they adopt a stricter approach than that adopted at the international level. On the other hand, other international commitments are of a more general nature, adopting broad principles, methods and processes (most notably, the Biodiversity Convention), so states have wider options in implementing them at the national level. Nonetheless, these broad principles and general obligations may have a highly innovative impact on the design of national legislation, particularly when introducing new concepts in a national legal framework (for instance, the participatory approach).

On the basis of the international legal framework on wildlife management, the following chapters will discuss the main elements of wildlife legislation, based on the experience of the FAO in advising member countries in the review of existing and drafting of new legislation on renewable natural resources⁵⁹ and on the identification of trends in national wildlife legislation in different regions of the world.⁶⁰ For each element, recommendations and legal options have been drawn up to provide guidance to national legal drafters that are embarking on reforms.

⁵⁹ See, for instance, the following earlier publications of the FAO Development Law Service: Cirelli, M.T. 2002. *Legal Trends in Wildlife Management*, FAO Legislative Study No. 74; Lindsay, J. 2004. *Legal frameworks and access to common pool resources*, FAO Legal Paper Online No. 39; and Rosenbaum, K. L. 2007. *Legislative drafting guide: A practitioner's view*, FAO Legal Paper Online No. 64. The FAO Legal Papers Online are available at www.fao.org/legal.

⁶⁰ Morgera, E., Wingard, J. and Fodella A.; 2009. *Developing Sustainable Wildlife Legislation in Central and Western Asia*, FAO/CIC. 2009. Cirelli, M.T. and Morgera, E. 2009. *Wildlife law and the legal empowerment of the poor in Sub-Saharan Africa*, FAO Legal Paper Online No. 77; *Wildlife law and the legal empowerment of the poor in Sub-Saharan Africa: additional case studies*, FAO Legal Paper Online No. 79; Aguilar, S. and Morgera, E. 2009. *Wildlife law and the legal empowerment of the poor in Latin America* FAO Legal Paper Online No. 80; Tsioumani, E. and Morgera E., 2010. *Wildlife law and the legal empowerment of the poor in South-East Asia and Oceania* FAO Legal Paper Online No. 83. These are all available at www.fao.org/legal.

**PART II –
ELEMENTS OF NATIONAL WILDLIFE LEGISLATION**

2. METHODOLOGICAL ISSUES

This chapter addresses approaches to good legal drafting that are generally applicable to laws on renewable natural resources, with a view to discussing their specific relevance to wildlife law-making. These include the need to develop a wildlife policy, drafting clear legislation, adopting a multi-disciplinary approach, and avoiding legislative overreaching. For each of these issues, specific legal drafting options will be identified in the specific context of sustainable wildlife management.

2.1 Developing a wildlife policy or strategy

Wildlife law reforms should reflect the vision and the programme of the government. That vision should address the sector's environmental and social needs, including the needs of the poor. Where, for example, there is need for subsistence hunting, the government must address the issue and accommodate sustainable subsistence uses. Where there is potential for sustainable tourism development, the government should provide for viable arrangements that are open to marginalized groups and local communities. Overlooking (or over-regulating) some aspects, such as traditional hunting and wildlife-watching tourism, may exclude disadvantaged people from legal processes altogether.

A constructive way to identify issues and determine the scope of legal reforms is to develop a written wildlife policy. A policy (or strategy) provides principles and plans to guide future actions. A well crafted policy balances social, economic and environmental considerations. It specifically provides guidance for planning, resource allocation as well as legal reforms. It considers the country's international obligations (discussed above in chapter 1) and it fits with existing domestic laws, institutions and policies (discussed below in this chapter).

The national wildlife authority will most likely lead the process of policy development. The process will start with the identification of the relevant stakeholders, and of existing constraints and prospects for the development of the wildlife sector, including legal bottlenecks and opportunities. On the basis of the problems identified, the policymakers will identify possible solutions to discuss with stakeholders having an interest in wildlife management.

A top-level policy should define the goals of wildlife management for a medium- to long-term period, looking far enough ahead to assure sustainability. For each goal, it should identify implementation tools, including capacity building and training, public education and awareness-raising, technical work, and revision of legislation and of the institutional set-up. Finally, it should set out responsibilities, time frames and resources necessary for policy implementation.

Ideally, the policy will represent a consensus among all relevant stakeholders. At the least, the policy should represent the official position of the government.

A good policy becomes the guiding document for legislative reform. It will be more than a legislative guide, however. It will describe an overall, coordinated, multifaceted approach to wildlife issues. It may call for legislative reform, but it may also call for agency actions within existing legal authority and cooperative support outside the government.⁶¹

The policy may also discuss how the government will revise the policy, and legislation may ultimately set out requirements for future policymaking. In Burkina Faso, for instance, the Forest Code requires that the national forestry policy includes management of fauna, and should be based on the actual involvement of stakeholders and decentralized management (Forest Code, articles 6–7). Similarly, in Georgia, legislation calls for a national policy on wildlife management (Law on Wildlife, article 10), and in Kazakhstan the government is to develop wildlife policy and programmes according to the Law on Wildlife (article 8).

Developing wildlife policies can introduce and elicit support for **innovative approaches** to wildlife management, particularly for the empowerment of the poor. In India, for instance, the National Wildlife Action Plan 2002–2016 recognizes among its policy imperatives the need to build peoples' support for wildlife through conservation programmes, to reconcile livelihood security with wildlife protection and to address human-wildlife conflicts as a crucial management issue through innovative approaches. Along similar lines, Lao PDR 2004 National Biodiversity Strategy and Action Plan have the stated goal to maintain biodiversity as a key to poverty alleviation and to

⁶¹ This section draws, *mutatis mutandis*, from Vapnek, J. and Spreij, M. 2005, *Perspectives and guidelines on food legislation, with a new model food law*, FAO Legislative Study No. 87.

protect the current asset base of the poor. In the same vein, one of the objectives of Viet nam's 2003 Strategy on Management of the System of Nature Conservation Zones till 2010 is the combination of conservation and development activities, so that the nature conservation zones contribute to comprehensive growth, hunger elimination and poverty alleviation. The policy statement of Malaysia's 1998 National Biodiversity Policy is "to conserve Malaysia's biological diversity and to ensure that its components are utilized in a sustainable manner for the continued progress and socio-economic development of the nation." Its principles include that the sustainable management of biological diversity is the responsibility of all sectors of society; it is the duty of government to formulate and implement the policy framework for sustainable management and utilization of biological diversity in close cooperation with scientists, the business community and the public; and the role of local communities must be recognized and their rightful share of benefits ensured. Its objectives include optimizing economic benefits from sustainable use and ensuring long-term food security.

In some instances, **broader biodiversity policy documents** may include policy guidance specific or related to wildlife. In the Philippines, the 2006 National Biodiversity Strategy establishes the National Policy of Biological Diversity, which recognizes that the protection, conservation and sustainable use of biodiversity are a shared responsibility among all sectors. It therefore calls for collaboration among all concerned government offices with the private sector, civil society and local communities "so that biological diversity goals are incorporated in their respective programs and activities, including institutionalizing biodiversity conservation as a principal corporate environmental responsibility. Public participation in protection, conservation and sustainable use activities, especially at the local level, shall be encouraged to maximize conservation and community benefits" (2006 Executive Order No. 578, section 2). Clearly such policy should then be reflected in wildlife legislation.

Wildlife policies may also be effectively **integrated in the wildlife management planning** process (see chapter 3 below), in which case legal guarantees for public participation are particularly important. This is, for instance, the case in New Zealand, where the Director-General of the Conservation Department drafts statements of general policy, which become the basis for conservation management strategies and plans. After consultation with the New Zealand Fish and Game Council in the case of

sports fish and game policy, or the Conservation Authority in any other case, the government makes draft statements available for public inspection and invites comments by interested persons and organizations and regional councils, before the relevant minister adopts the final draft (Conservation Act, section 17).

Box 2-1: Options for legal provisions on wildlife policy

- Enact provisions calling for the periodic development of wildlife policies or strategies, possibly specifying certain issues to be addressed or principles to be respected (such as environmental sustainability, poverty reduction, the role of non-governmental stakeholders in decision-making and management, etc.);
- require a participatory process in wildlife policy making, possibly including steps such as:
 - identifying concerned stakeholders,
 - giving advanced notice to stakeholders and the public of the policymaking process,
 - publishing drafts of the proposed policy, before it becomes final, for public comment,
 - publishing expert analyses comparing the proposed policy to alternatives, taking into account public comment on proposals and perhaps also comment from a designated advisory body representing a cross-section of stakeholders,
 - holding public hearings or consensus-building workshops, and
 - publishing a reasoned summary of public comments with the final document;
- tie wildlife policies/strategies to the wildlife management process, and require that wildlife use authorizations respect the principles enshrined in the policy.

2.2 Drafting clear and understandable legislation

The legislative drafting process should also be open to public participation. By tapping into the perspectives of affected people, public participation helps educate the drafters and ensure that the new legislation is practical.

Open participation can build a sense among stakeholders that the law is legitimate and fair, which will encourage compliance. Participation can also educate stakeholders, building capacity in the knowledge and use of the law and in the exercise of rights – a critical way to ensure empowerment of the poor.

Participatory legislative drafting requires the genuine involvement of all categories of stakeholders at the central and local level, in urban and rural contexts (government and non-governmental institutions, central and local institutions, local communities and traditional wildlife users, private sector organizations, farmers, environmental NGOs and hunters' associations). It also requires a true commitment to understand the needs, objectives, insights and capacities of intended users of the law and to find ways to accommodate multiple interests at stake.⁶²

As discussed in Chapter 1, for parties to the Aarhus Convention ensuring public participation in wildlife lawmaking is also a matter of fulfilling an international obligation. In addition, in accordance with the Convention on Biological Diversity, participatory legislative drafting provides an avenue for bringing on board the concerns of local and indigenous communities, particularly their traditional use of wildlife, as well as traditional knowledge and practices related to wildlife conservation. Accordingly, the Addis Ababa Principles and Guidelines invite decision-makers to consider local customs and customary law when drafting new legislation.⁶³

The general public, as well as wildlife management professionals need to have clear understanding of their rights and responsibilities under the law. Clarity of the law will also avoid or minimize doubts or conflicts in the interpretation of legislation by national courts.

One step towards clarity is to draft using **plain language**. The use of a few legal terms is unavoidable, but on the whole the drafter should aim to use language within the grasp of the regulated public, or at least of the government officials who will be implementing the law. If possible, the law should be user-friendly, avoiding complex syntax, terms with definitions that differ greatly from their commonly understood meanings, and confusing chains of cross-

⁶² Wingard, J. Lindsay, J. and Manaljav, Z. 2005. *Improving the Legal Framework for Participatory Forestry: Issues and Options for Mongolia with reference to International Trends*, FAO Legal Paper Online No. 46.

⁶³ Addis Ababa Principles and Guidelines, practical principle 1, first operational guideline.

references. Ideally, a layperson should be able to read through a proposed law once, from beginning to end, and grasp its major points.

Another indispensable means to allow people to fully comprehend the contents of the law is for the law to be expressed in the local language. Given the variety of languages that continue to exist in many regions of the world, **translations from the official language into local ones** are sometimes difficult and this may make legislation inaccessible for most rural people. This can be a serious hindrance to the implementation of the first pillar of legal empowerment of the poor – access to the rule of law.

Beyond clarity of language, ambiguity can creep into a law through what the law fails to say. One of the challenges to clarity identified in FAO's regional reviews of national legislation concerns not **expressly repealing** older principal and subsidiary legislation. This practice is fairly common. Examples include general laws on wildlife enacted after regulations adopted under previous laws, and general laws on wildlife enacted after previous specific laws. This happened for example in the Central African Republic where laws on hunting guides, hunting by foreigners and the introduction of weapons by non-resident hunters were not expressly repealed by the 1984 Wildlife Ordinance. In the Democratic Republic of Congo, the 1982 Hunting Law makes reference to an older decree and points to the need to fill gaps left by it, without clarifying whether such decree is completely replaced by the law.

Usually the new law states that all legislation previously in force is repealed to the extent that it conflicts with it, or the repeal is implied (under the principles of statutory construction) even where such a statement is not expressly made. However, sometimes whether the previous legislation is superseded is debatable, and this *per se* may very well undermine legal certainty. Although the practice of not expressly specifying which texts are repealed is formally acceptable, it is preferable to avoid it. The drafter should expressly identify existing provisions to be repealed. If subsidiary legislation is repealed, the government should swiftly put new implementing regulations in place.

Repealing repeals is also an issue. That is, if one repeals a law that itself included a repeal, this sometimes raises a question of whether one intended to revive the legislation that was repealed under the first repeal. If there is any doubt about this, the new law should specifically address whether the legislation previously repealed is revived or not.

Another way to address the repeal issue is by amendment (for instance, "the Wildlife Act is amended by striking Title I and inserting as a substitute the following language"). It may also be possible to insert transition language discussing what happens to licenses and permits issued under the repealed law, what happens to institutions created under the old law, what happens to lands reserved under the old law, and so forth. Overall, the question of repeals is a very difficult one, which demands careful research to understand the old law and its ramifications. The research is almost always time well spent.

Having **too many legal instruments** dealing with wildlife management can also contribute to uncertainty. In the specific case of the Russian Federation, for instance, a myriad of legal instruments relate to wildlife, some dating from before the collapse of the Soviet Union.⁶⁴ The Law on Wildlife, which is quite recent and relatively comprehensive, does not fully regulate hunting at the federal level. The parliament has long had a draft federal law on hunting under consideration, but has not approved it.⁶⁵ In the meantime, the subjects of the Russian Federation⁶⁶ have adopted their own legal instruments on hunting, which often contradict federal legislation covering issues pertaining exclusively to the competence of the Federation.⁶⁷ This result is a complex legal framework that is fraught with contradictions and obsolete provisions, which ultimately renders it difficult for authorities and users alike to understand.

Piecemeal legislation – consisting of laws, decrees, ministerial resolutions and provincial legislation adopted at different times – may often hold contradictory requirements on hunting, on wildlife as forest produce and on wildlife conservation in protected areas (for more on this, see the next section of this chapter). In all events, a high level of expertise and insiders' knowledge of institutions becomes necessary to understand the overall wildlife management legal regime. This complexity can place legal wildlife management beyond the reach of disadvantaged communities.

⁶⁴ See Consultant+ at www.consultant.ru.

⁶⁵ The latest draft of the Federal Law "On hunting and hunting economy" dates 14 June 2007, and is available in Russian on the official website of the State Duma of the Russian Federation (www.duma.gov.ru).

⁶⁶ The expression "subjects of the Russian Federation" includes different legal entities that are part of the Federation, according to the federal structure outlined in the Constitution.

⁶⁷ See Consultant+ (www.consultant.ru). Several hunting laws of the subjects of the Russian Federation are available on the FAO legislative database, FAOLEX (faolex.fao.org).

Better alternatives are to enact consolidated legislation or to produce a comprehensive guide to the law, possibly available online, ensuring clear elucidation of licensing requirements, fees and other issues. Although most legislation in Latin America, for instance, is available online, few countries have provided user-friendly versions to facilitate understanding of legal requirements. Ecuador, however, collates all legislation deriving from disparate sources and related directly or indirectly to wildlife in a consolidated text that is easily accessible online. It should also be considered that indigenous and local communities may not have internet access, and other methods to raise their awareness about the law should be explored (Aguilar and Morgera, 2009).

Box 2-2: Legal options for ensuring clarity

- Draft legislation bearing in mind the viewpoint of wildlife users and those interested or involved in wildlife management and conservation;
- always clarify who is the person or entity responsible for certain prescribed action, or who is entitled to certain rights or benefits;
- organize legal provisions in a logical order, from the more general to the more specific one;
- clearly identify when earlier provisions have been repealed or amended, and where implementing regulations or other secondary legal instruments are needed;
- make available legislation in local language(s), as well as explanatory documents or user-friendly compendia of applicable wildlife laws and regulations to facilitate users' understanding of the legal framework.

2.3 Adopting an integrated approach

Never adopt legislation in a vacuum. A new law should complement other laws and sectoral strategies. Drafting sustainable wildlife management legislation is no exception. An integrated approach that takes into account other sectoral laws (environment, protected areas, land, forest, agriculture, possession of arms, and tourism) is critical for the effectiveness of wildlife legislation.

Sometimes the problem is **integration of topics within wildlife management** itself. Where the main relevant piece of legislation is relatively old, as in the Democratic Republic of Congo (Hunting Law of 1982), the focus of the law tends to be on hunting, rather than generally on wildlife management. This approach is typical of legislation of a previous generation, in which the importance of biodiversity as a whole did not come into consideration and the main concern was to prevent overexploitation of game, often still with a view to protecting hunting interests. Such narrow legislation may need revision to address non-game species, trade regulation, habitat protection and other modern aspects of wildlife conservation.

Sometimes problems of coordination are a direct consequence of **loosely drafted definitions** and reflect on important aspects, such as sharing of institutional responsibilities. A typical problem is exemplified in the definition of "forest produce" or "forest resources" as used in forest laws. This definition may include wild animals although not all the affected provisions of the law are intended to refer to animals. This is the case, for instance, of the provisions of the Forest Act of Malawi, which defines forest produce as including wild animals and authorises the "collection" of "forest produce" for domestic needs on customary land (section 50). It is unlikely that the act's authors intended to authorise the taking or hunting of wild animals for domestic needs without a permit, especially given the use of the term "collect", which is less appropriate than the word "take" as a synonym of "hunt". In a similar case, in Zimbabwe, a consequence of the definition of "forest produce" (Forest Act, sections 2 and 35) is that different entities seem to be given responsibility for wildlife found in different categories of forest areas, because the Forestry Commission's responsibility is limited to wild animals in "demarcated forests". If responsibilities are actually meant to be thus allocated, this should be expressly stated, rather than implied with some uncertainty by the definitions.

Sometimes coordination issues arise from general **overlap of jurisdictions**. In Armenia, the Forest Code authorises forest owners to use forest resources including fauna under a forest management plan (articles 3–6, 15, 18–20 and 35), but the Law on Fauna has provisions on protection of fauna, their habitats and migration routes. The relationship between the two laws remains to be clarified. In Kazakhstan a general coordination clause in the Forest Code gives priority to wildlife-specific (and protected areas-specific) legislation (article 1), yet the Forest Code regulates directly and explicitly issues such as hunting and enforcement of wildlife legislation (articles 38 and 113), which

certainly fall under wildlife legislation. Drafters should be on the lookout for these kinds of discrepancies, as they can only contribute to unsustainable management.

Sometimes the issues extend outside the area of natural resources to **coordination with broader laws** dealing with taxes, procurement and other general functions of government. For example, in Georgia, the 2005 Law on Licenses and Permits drastically reduced the number of permits and licenses required to use natural resources, and wildlife in particular, and simplified procedures. While this may have trimmed down the bureaucratic process, it may have too heavily reduced state control over environmental protection and sustainable use of wildlife. Moreover, the new system fits less coherently within the legal framework on wildlife than the previous one. Finally, the Law on Licenses and Permits is ambiguous on the extent to which it repealed earlier laws. Although the law specifies that no licenses or permits may be issued except when in accordance with the law itself (articles 4 and 38), it is unclear whether it has repealed all the previous more extensive legal regimes dealing with licenses and permits, or whether it replaces only previous incompatible provisions, leaving the other compatible ones in force. Transitional and conclusive provisions on the relationship with other legal instruments leave the question partially open (see section 2.2 above).

The drafter should make an effort to prevent problems of coordination. Before developing new legislation, the drafter should identify and analyse all of the existing legal provisions that are directly or indirectly related to wildlife management. The drafter should look beyond wildlife laws to legislation of general application (first and foremost the constitution, and then property laws, civil and criminal law, tax law, etc.).

This analysis will help determine the range of reforms that will be necessary, while outlining the parameters within which any new regulation will take place. It will identify gaps where no rules exist on specific aspects of wildlife management, or where rules are insufficient or outdated. It will also identify inconsistencies within the wildlife-specific legal framework, or between that framework and other related laws. Finally, it will also identify areas where the laws have proven difficult or even impossible to implement or enforce. Carrying out an initial analysis of the existing framework serves, therefore, to map the scope of legal reforms needed: the preparation of a new legal

instrument, or in other cases, only amendments to existing legal instruments, for example to add a few specific obligations or to enhance coordination.⁶⁸

The Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity support this approach. They call for "identify[ing] any overlaps, omissions and contradictions in existing laws and policies, and initiating concrete actions to resolve them."⁶⁹ The Addis Ababa Principles and Guidelines also call for coordinating authority among levels of government, "strengthen[ing] and/or creat[ing] cooperative and supportive linkages between all levels of governance in order to avoid duplication of efforts or inconsistencies."⁷⁰

Besides identifying areas where change is needed, the drafter may find examples that deserve to be followed. For example, there may be useful terms with identical definitions in several different laws, or terms defined in one law that would create confusion if defined differently in a new law. Where the new law draws upon an existing law, appropriate references will help readers see the connection. On the other hand, where the drafter intends to derogate from more general rules, the law should expressly state so.

Box 2-3: Legal options for supporting a integrated approach

- Adopt a holistic approach to wildlife management, taking into consideration wildlife conservation as well as its multiple uses;
- exercise caution in the use of new definitions or in making reference to definitions already used in other sectoral legislation, so as to avoid undue contradictions or overlaps. Consequences of definitions of related terms, even if given in different laws, must be cross-checked throughout the texts in order to avoid awkward implications;
- make appropriate references to other applicable legislation. When intending to derogate from more general rules, expressly state so.

⁶⁸ This part draws upon Chapter 5 of Vapnek, J. and Spreij, M. 2005. *Perspectives and guidelines on food legislation, with a new model food law*, FAO Legislative Study No. 87.

⁶⁹ Addis Ababa Principles and Guidelines, practical principle 1, third operational guideline.

⁷⁰ Ibid., fourth operational guideline.

2.4 Avoiding legislative overreaching

Legislation should be realistic: to ensure compliance, legislation should provide for obligations that people can reasonably comply with, taking into account the capacity of public authorities and other stakeholders. This is also reflected in the Addis Ababa Principles and Guidelines, where reference is made to the need to "avoid unnecessary and inadequate regulations ... because they can increase costs, foreclose opportunities and encourage unregulated uses, thus decreasing the sustainability of use."⁷¹ Similarly, CITES stresses the need for appropriate policies and legislation, by establishing transparent, practical, coherent and user-friendly administrative procedures, and reducing unnecessary administrative burdens (see chapter 1 above).

Writing realistic laws always involves striking balances. The easiest law to implement is one that does nothing, but unregulated, open access to wildlife is seldom a workable approach. The next easiest law to implement is one that prohibits everything. Such a law leaves few questions for enforcers and the public about what is lawful, but it rules out most use of the resource. Two more common, practical approaches to regulation seek the middle ground between liberty and prohibition. The first is to allow use of wildlife generally, but to provide some rules for that use. The second is to prohibit use of the resource, with tailor-made exceptions.

The choice of approach should reflect the resources available for the implementation and enforcement of wildlife legislation, and the need to choose legal tools with low enforcement costs, focusing the scarce resources available on species or areas of major concern. **Cost-effectiveness** is thus an important issue to bear in mind.

In Latin America a common approach consists in combining a general prohibition for extractive uses of wildlife with specific exceptions. Exceptions usually allow subsistence hunting or scientific takings, and sometimes also recreational hunting or commercial extractive uses in accordance with sustainable management plans for particular species that have been approved at the national level (Argentina, Brazil, Bolivia, Costa Rica and Ecuador). Interviews with wildlife officials have confirmed that this approach is justified on grounds of regulation efficiency: general prohibitions with a handful of exceptions allow simpler and less costly enforcement.

⁷¹ Ibid., practical principle 3, third operational guideline.

However, they recognize that such an approach, by placing severe restrictions on wildlife use, generates an indirect incentive for land-use change. Private land owners perceive this as a reason to choose other uses of land that are less strictly regulated, thus favouring the transformation, for example, of wild pastures or forests into agricultural lands – with the accompanying detriment to biodiversity (Aguilar and Morgera, 2009).

Chile and Guatemala, however, have adopted a different approach, categorising all native species according to their conservation status and establishing allowed uses for each category. Lack of resources to undertake wildlife population studies, and the application of the precautionary principle, lead to the inclusion of many species within categories than ban extractive uses. Nevertheless, this system has the advantage over a general ban that it provides potential flexibility for users, while limiting bureaucracy and enforcement costs. It does require, however, regular updates to species categorizations based on scientific information and the precautionary principle. It further does not allow for the consideration of site-specific approaches, as species may be more abundant in some areas than others. It may also pose other enforcement challenges, as it requires enforcement officers and border agents to have knowledge of taxonomy in order to detect violations of the law (Aguilar and Morgera, 2009).

Mexico uses a more sophisticated area-based approach that enables any landowner to register property as a wildlife management unit (*Unidades de Manejo para la Conservación de Vida Silvestre* - UMAs) (Wildlife Law, article 39). UMAs can be established in both private and public lands, including protected areas, and currently encompass more than 20 million hectares (which is almost equivalent to the size of protected areas in Mexico). Once registered, managers of UMAs must use wildlife according to sustainable management planning criteria, approved by environmental authorities, and may trade the products resulting from their activities. The Mexican approach thus allows the implementation of basic sustainable management planning regulations, including extraction quotas and annual reporting requirements, in vast areas of private land that would otherwise be unregulated. Another benefit of this system is its potential to reduce perverse incentives for land-use change. Although enforcement is undoubtedly complex in a large country such as Mexico, uniform national legislation and a centralized mechanism to obtain permits for wildlife management (available online) create a workable legal framework. This arrangement may promote pro-poor management, when local and indigenous communities are the holders of

wildlife management units. The system is, however, bureaucracy-intensive, requiring national authorities to review all management plans and provide for more specific controls and enforcement measures, thus entailing a more efficient, yet costly, enforcement alternative.

Overall, legislation must be tailor-made to each country's capacity for implementation and enforcement. This is not to say that legislation should never bring change. That is of course the point of reform – to introduce new management concepts and practices as a way of filling gaps or aligning national legislation with international standards and obligations. When the capacity to implement change is small, the law can introduce change incrementally, and be reviewed in time as capacity increases. Thus, where certain wildlife management goals are beyond immediate reach, it may be useful to treat legislation as preliminary and include steps to prepare the system for further reform.

Finally, in light of the chronic lack or delayed enactment of **implementing regulations** in many countries in the world, drafters need also to consider carefully the essential provisions to be included in the law and how much should be left to subsidiary legislation (rules, decrees, bylaws, regulations, etc.). If possible, the law should be operational on its own, despite any delays of developing and adopting implementing regulations. To this end, the law should spell out the *rights* and *obligations* it creates (or rather *powers* and *responsibilities*, when public authorities are concerned), and the basic objectives and principles for the processes to implement them. This should not result in an overly detailed law, but rather clarify the mandate for, and facilitate enactment of subsidiary legislation. The law should generally leave technical specifications to subsidiary legislation.

Box 2-4: Legal options for avoiding legislative overreaching

- Use "trigger" provisions if certain regulatory goals are not immediately achievable. For example, if community management of a trophy hunting concession is the desired goal, it may be useful to establish a legal requirement that trophy hunting will only be allowed where:

- scientific evidence demonstrates that a viable wildlife population exists to support such hunting; and
- the community has initiated specific management activities and entered into an agreement for collaborative management with the appropriate agency;
- use a "phase-in" approach if certain regulatory goals are not immediately achievable, through recourse to "grace periods" (whereby existing practices may continue for a specified period of time before some other requirement must be fulfilled). This allows for the gradual implementation of the law in a manner more likely to receive compliance than an immediate obligation that neither government agencies, nor local communities are prepared to assume. Thus the law, for instance, may state:
 - that hunting in a given area may continue for a period of three years from the date the law becomes effective, after which a management plan covering the area and targeted wildlife must be in place;
 - that areas failing to meet the requirement will have hunting rights terminated until the requirement is fulfilled;
- use pilot experiences to test new legal approaches within a restricted geographical area. In light of lessons learnt, national legislators may decide to opt for new legal tools that meet local circumstances and capacities;
- spell out in the main piece of legislation, at a minimum, the rights and obligations the law creates, and the basic objectives and principles for the processes to implement it, thus clarifying the mandate for, and facilitate enactment of subsidiary legislation. Leave technical specifications to subsidiary legislation.

3. INSTITUTIONS AND PUBLIC PARTICIPATION

This chapter turns specifically to legal tools to ensure effective wildlife institutional set-ups, inter-institutional coordination for wildlife management, public participation in wildlife-related decision-making, as well as public access to information and justice. It concludes by analysing tools for clarifying wildlife tenure and its legal consequences, and addressing gender equality and food security considerations.

3.1 Ensuring clarity in the institutional set-up

Another general principle for good legal drafting, which is also applicable to wildlife management laws, is that the law should clarify the mandate and functions of public authorities. "Legal mandates" refer to provisions requiring or allowing government agencies or persons to engage in activities affecting the resource or its components. This deliberately broad concept encompasses all possible actions, activities, permissions or even prohibitions. Usually, legal mandates are framed in general terms, thus resulting in difficult practical application, with no guidance as to the exercise of powers or limits to discretion or procedures for decision-making. The law should instead provide some guidance to the exercise of public discretion, to increase the legitimacy and accountability of public authorities.⁷² Furthermore, to enhance accountability and avoid conflicts of interest, the law should avoid mixing management/commercial activities and control functions in the same (public or private) body.

Overall, institutional arrangements for wildlife management reflect the particular characteristics of each country and the relative priority attributed to environmental management. Wildlife management authorities may be unified to include tasks related to wildlife and protected areas. Mexico, for instance, has a unified system governing all elements of biodiversity, placed in the environment ministry (Wildlife Law, articles 14–16). In Swaziland the Environmental Authority and National Trust Commission's responsibilities regarding the environment include wildlife (Environmental Management Act and National Trust Commission Act, respectively). In France, most executive powers have been delegated to the National Office for Hunting and Wildlife, which is a public authority under the aegis of both the Ministry of Ecology and the Ministry of Agriculture. The Office deals with questions of the general hunting policy and enforcement of hunting rules, prepares annual reports on hunting activities, organises the investment and development programmes in relation to hunting, but also gathers information in relation to wildlife and its habitat (Environmental Code, article R421-13). But even in these scenarios, conflicts may arise between wildlife biologists and foresters in a single agency. Officials regulating hunting or fishing can clash with officials responsible for endangered species protection in the same agency.

⁷² This is also encouraged from an ecosystem approach perspective: see CBD Decision VII/11 (2004) on the ecosystem approach (hereinafter, CBD Decision VII/11), Annex, principle 1.6.

Institutions in charge of wildlife management can be part of environment ministries (Belize, Brazil, Costa Rica and Ecuador), agricultural ministries (Chile and Peru) or, in some cases, protected area authorities (Guatemala). Country studies show that placing wildlife management authorities under the aegis of one ministry or another does not have a major influence on the development of each country's legal framework, although it may determine the general approach towards wildlife management – use-focused or conservationist – and the availability of funding – as some ministries have larger budgets than others (Aguilar and Morgera, 2009).

In other instances, tasks may be allocated to different ministries, so a division of labour should be provided by legislation. In certain cases, institutional mandates may be particularly fragmented. This may reflect accidents of history. For example, wildlife may be included in the portfolio of the forestry agency because originally wildlife management meant regulation of hunting in forests. In the US, the Secretary of the Interior is responsible for terrestrial hunting, endangered species protection, national parks and refuges; Agriculture is responsible for habitat management on national forests; Defence regulates wetland habitat alteration; Justice prosecutes wildlife crimes; and Homeland Security implements CITES customs controls and certain precautions related to invasive species.

Often provisions of **principal legislation** regarding institutions are brief and general. This is frequently because governments usually wish to retain some flexibility in the allocation of responsibilities among ministries and departments. Therefore, acts of parliament, which are not meant to be frequently revised, do not go into the details of institutional arrangements, but remain a basis for administrative arrangements that may vary from time to time. This may be an acceptable approach, as long as any institutional restructuring is timely supported by clear **subsidiary legislation** based on the applicable principal legislation. Sometimes the identification of responsible institutions and their functions is difficult if based solely on the examination of legislation. An example is Burkina Faso, where provisions referring to institutions are brief and clear in the Forest Code, placing responsibilities to preserve forests, wildlife and fishery resources on the "technical forestry services", in consultation with all other concerned actors. However, pursuant to more recent legislation – the decree of 2008 creating the National Protected Area Service – the latter is responsible for ensuring the sustainable management of forests and wildlife, creating confusion as to whether any other technical forestry services continue to exist (Cirelli and Morgera, 2009b).

Countries with a federal system often suffer from duplication of mandates over wildlife among federal and state authorities (i.e. wildlife may be under state jurisdiction as far as hunting is concerned, but pertain to federal jurisdiction if transport or endangered species under federal protection are concerned). It is therefore necessary to clearly specify the **division of labour between different territorial levels of government**. In China, legislation addresses this aspect in detail. There, local administration of wildlife management is organized at three levels (province, prefecture and county). The State Forestry Administration, at the central level, is responsible for the nationwide management of terrestrial wildlife. Wildlife departments at various levels are to monitor impacts on wildlife, conduct investigations with the departments concerned in case of harm and oversee implementation of the Wildlife Protection Law through inspections, whereas local governments must take measures to rescue wildlife under special state or local protection in case of natural disasters (Wildlife Protection Law, article 7).

In Japan, legislation charges the state with formulating and implementing fundamental comprehensive policies for environmental conservation and taking legislative, financial and other measures; while local governments, i.e. prefectures and municipalities, must make and implement local wildlife management plans and implement hunting regulations, and can establish several types of prefectural protected areas (Basic Environmental Law, articles 6–7). In Lao PDR, the Ministry of Agriculture and Forestry is responsible for developing strategic policies, regulations and laws on wildlife, whereas district and municipal offices are responsible for registering wildlife used for breeding and hunting equipment; authorizing people at the village level for wildlife management and conservation; and monitoring implementation activities of the village forestry units (Wildlife Law, articles 54–57).

International standards generally support decentralization of wildlife management (although given that ecosystems do not respect village, province or even national boundaries, the central government will retain important functions related to the monitoring and management of migratory species and cumulative impacts). In decentralizing, the central government must ensure that decentralized authorities are trained, sourced and ready to assume these responsibilities. To a limited extent, legislation may address the issue of ensuring **adequate resources** for decentralized wildlife management authorities. In the US, for instance, the Federal Aid in Wildlife Restoration Act provides federal aid to states for management and restoration of wildlife (16 USC 669b). The federal government collects an

excise tax on sporting arms and ammunition and may provide the income to states or Indian tribes to use for improvement of wildlife habitat, introduction of wildlife into suitable habitat, research into wildlife problems, surveys and inventories of wildlife problems, acquisition and development of access facilities for public use, and hunter education programs (16 USC 669b). States, through their fish and wildlife agency, must submit detailed plans of projects to the Secretary of the Interior to be considered for the program (16 USC 669e) The secretary chooses which states may receive funds, assigning priority to those species with the greatest conservation need as defined by the state wildlife conservation and restoration program (16 USC 669b).

Finally, legislation may also **delegate** powers to private entities that can perform certain tasks more efficiently or have a longer tradition of implementing participatory approaches. In Jordan, the Ministry of Agriculture and the Ministry of Environment delegated significant powers to an **NGO**. In 1975 the Ministry of Agriculture empowered the Royal Society for the Conservation of Nature – a voluntary organization established in 1966 under royal patronage – to implement wildlife legislation, regulate hunting and manage protected areas (Agriculture Law, article 64). In addition, by virtue of a recent Memorandum of Understanding between the Ministry of Environment and the Royal Society, the latter also may establish and manage nature reserves and act for their sustainable development. A bilateral committee is envisaged to lay down plans and programmes for the establishment of nature reserves, approval of new ones and expansion of the existing ones. In Mongolia, the Law on Fauna follows a similar approach: NGOs may implement fauna protection and breeding measures, according to contracts concluded with local governors and to permits issued by the central government organization. NGOs may also carry out activities related to law enforcement (article 21).

In France, **hunters' associations** are allocated significant management powers by law. These associations are in charge of monitoring hunting activities, preventing poaching, training hunters, supporting the work of wildlife management authorities, preparing the hunting licence exam and hunting plans, and preventing any damage caused by game (Environmental Code, article R421-39).

In the Philippines, special laws can give management jurisdiction or control over certain wildlife species or habitats, or the mandate to conduct scientific research, to **academic institutions**, in which case a memorandum of

agreement is signed with the central wildlife management authority (Implementing Rules and Regulations of the Wildlife Act, rule 4(9)). It should be noted, however, that in some countries there might be barriers to such delegations. In some jurisdictions delegating traditional government powers (rule-making, arrest, adjudication) to private organizations is strongly limited or even prohibited. In others, where the government is considered a trustee of the natural resources, unlimited delegation might be a violation of that trust responsibility. Drafters should check carefully relevant provisions of the constitution and other general legislation in this respect.

Box 3-1: Legal options for clear institutional set-up

- To facilitate and legitimize the work of wildlife authorities, define at a minimum the powers and responsibilities of each level of authority, and clarify their respective mandates and division of labour. To this end, the law should establish which key government service is responsible to users, and identify discrete components of the mandate of government services at the central and local levels;
- specify the criteria according to which powers should be exercised (for example, by requiring compatibility with wildlife management plans, or with overall objectives for a particular type of wildlife);
- ensure that the actions of public authorities are open to public scrutiny and that their decisions can be judged against measurable criteria, to avoid any abuse of authority;
- clarify the division of labour between central and decentralized authorities, and possibly provide for support from the central to the local level;
- provide opportunities for delegation of powers to non-governmental stakeholders through frameworks that allow monitoring by authorities and mutual learning, where the broader legal framework allows it.

3.2 Ensuring inter-institutional coordination

As wildlife legislation does not exist in a vacuum but must be coordinated with legislation in other relevant areas, so wildlife authorities need to coordinate their activities with other line government agencies in related areas of work. Laws sometimes say little about coordination or joint-decision

making. The law should, however, institutionalize coordination and clarify how and when inter-institutional coordination should be sought. This is particularly important when relevant legal mandates are and will likely remain scattered among different institutions.

Provisions that create an **inter-ministerial or inter-sectoral body** on environmental matters may facilitate coordination between environmental and wildlife authorities. In Mauritius, in addition to the National Environment Commission made up of ministers, an Environment Coordination Committee further promotes cooperation, coordination and information sharing among agencies and departments dealing with environment protection (Environmental Protection Act, article 14). Specific coordination arrangements may also be in place for specific aspects of wildlife management. New Zealand formed the Wildlife Enforcement Group under a memorandum of agreement between three New Zealand government departments: the Customs Service, the Ministry of Agriculture and Forestry, and the Department of Conservation. Its aim is to stop organized illegal trade in wildlife involving import, export and related domestic activity (Tsioumani and Morgera, 2010).

A first question to be addressed by legal drafters in this regard is whether the multi-sectoral body will have purely **advisory** tasks. Malawi's Wildlife Research and Management Board (National Parks and Wildlife Act, sections 17–18) and the South African National Biodiversity Institute (National Environmental Management Biodiversity Act, sections 10–11) are both called upon to advise authorities in decision-making, specifically in the wildlife sector. Mexico has two multi-sectoral consultative organs advising the Secretary of Environment and Natural Resources (SEMARNAT): a National Technical Council for the Conservation and Sustainable Use of Wildlife presents opinions and recommendations on endangered species and critical habitats (Wildlife Law, articles 5 and 16), and a National Commission on Protected Areas (*Acuerdo* 08-08-96) advises SEMARNAT on the management and conservation of protected areas. In some cases, as in Lesotho, a multi-sectoral advisory body covers broader topics than just wildlife (the National Environmental Council; Environment Act, section 5).

In other cases, more than one advisory body is in place, each of which is to respectively address environment, wildlife or forestry. In Malawi, for instance, there is the Wildlife Research and Management Board (National Parks and Wildlife Act, sections 17–18); the National Council for the

Environment (Environment Management Act, section 10); and the Forestry Management Board (Forest Act, section 16). Similarly, in Namibia, there is the Nature Conservation Board (1975 Ordinance, sections 3 and 11); the Sustainable Development Advisory Council (Environmental Management Act, section 6); and Forestry Council (Forest Act, sections 2–3).

Costa Rica's National Environment Council advises the President on issues related to environmental policy, including the mechanisms to conserve "environmental elements" and the means to integrate them into the sustainable development process with the organized participation of communities (Organic Environmental Law, articles 77–78). In Japan, the Nature Conservation Council investigates and discusses nature conservation matters, in response to inquiries by the Ministry of the Environment or other concerned ministries (Nature Conservation Law, article 13).

Advisory bodies may influence significantly decision-making with provision of expert information. They may also allow a process of mutual learning and increased cooperation among the sectoral government entities involved. At the same time, their lack of stronger powers in relation to decision-making may make them more easily acceptable politically, as they may be seen as not threatening existing institutional mandates.

In other instances, however, multi-sectoral participation is ensured in **managing or regulatory entities**. In Turkey, the Central Hunting Commission, which is an independent decision-making body composed of 21 members (representing relevant public bodies involved in hunting management as well as hunters' organizations and private hunting areas) decides on species that can be hunted, hunting seasons, areas and quotas, hunting methods and weapons (Hunting Law, article 3). Decisions of the commission are binding, although the Minister of the Environment and Forestry may repeal them. Actions of the minister may be challenged in turn by relevant interest groups, before the administrative courts. The commission may delegate some of its tasks relating to hunting management to local institutions, such as provincial hunting commissions (public councils representing the state at province level), and county hunting commissions (the lowest level hunting body, organized, if necessary, by the city mayor and authorized to deal with hunting issues at county level).

Zambia's Wildlife Authority is responsible for the management of protected areas and, "in partnership with local communities", game management areas,

to ensure sustainability in wildlife management (Wildlife Act, section 5). In Uganda, a Wildlife Authority is the main administrative entity responsible for wildlife, including the preparation of management plans and the implementation of collaborative arrangements and policies for the benefit of communities (Wildlife Act, section 5). Brazil's National Environment Council (CONAMA) adopts national standards for environmental quality, environmental licensing and regulations on wildlife and protected areas (National Environmental Policy Law, article 6).

All the above examples provide for a stronger role of inter-institutional coordination bodies, with key management decisions in the hands of a varied group of authorities. This option may prove more empowering for participating sectors, as well as having more compelling effects on the reaching of coordinated decisions. It may, however, be less politically acceptable in some circumstances, where relevant institutions fear curbing of their mandates.

A combination of the two options outlined above is also possible. The New Zealand Conservation Authority – an independent authority combining advisory and regulatory tasks – advises the relevant minister on statements of general policy prepared under acts including the Conservation Act, the Wildlife Act, the Reserves Act and the Wild Animal Control Act; approves conservation management strategies and plans, and reviews them as required under these acts; reviews the effectiveness of general policies; investigates nature conservation matters of national importance; makes proposals for the change of status or classification of areas of national and international importance; and liaises with the New Zealand Fish and Game Council (Conservation Act, section 6).

Certain multi-sectoral bodies also include representatives of environmental NGOs, thus contributing both to institutional coordination and to public participation in decision-making (see next section). For example, while the Executive Council of Chile's National Environment Commission is composed of ministers from all areas related to the environment, including the ministers of economy, agriculture, health, transport and mining, Chile's National Advisory Council and Regional Advisory Councils are composed of representatives of academia, scientists, NGOs, business and labour unions (General Environment Law, article 78).

Another example can be found in the Philippines, where a National Wildlife Management Committee, which provides technical and scientific advice regarding the collection or use of wildlife, is composed of representatives from the wildlife administration, Department of Agriculture or Palawan Council for Sustainable Development, Environmental Management Bureau, other concerned government agencies as well as local scientists with expertise on various fields of wildlife. Stakeholders, however, are not permanent members of the committee, but may be invited as resource persons, when considered necessary (2004 Joint Implementing Rules and Regulations of the Wildlife Act, rule 6(1)–(2)). This option is clearly less empowering, as participation by stakeholder is left completely to the discretion of the authority.

Another question that legal drafters should address relates to the **definition of powers and duties** of multi-sectoral bodies. For example, in the Kosovo Forest Law, the Forest Advisory Board has the duty to accept and reply to citizen petitions, and the power to access agency files and conduct investigations. The chair of the board has the power to schedule meetings but must give members advance notice of times; board actions are by majority vote; and the board must keep and make available minutes of its meetings. Because of multi-sectoral bodies' importance for good governance and transparency, legislation should define clearly their *modus operandi*, putting in place certain guarantees that allow public scrutiny.

Inter-institutional bodies may also be created at the **local level**. In the Philippines, for instance, the regional offices of the wildlife administration or Department of Agriculture create regional wildlife management committees (2004 Joint Implementing Rules and Regulations of the Wildlife Act, rule 6(3)). Similarly, in Japan, prefectural or municipal ordinances may establish environment councils (Basic Environmental Law, articles 43–44). These local entities may facilitate coordination at a level of governance closer to the resource and concerned communities, and can therefore more effectively tackle local-level management issues.

One possible problem arising, however, from the proliferation of these inter-institutional bodies (which tends to emerge in Africa, for instance) is that of **coordination among different advisory bodies**. The various relevant laws sometimes envisage more than one advisory body respectively responsible for environment, forestry and wildlife – an aspect further addressed in the following section. Before providing for the creation of new advisory bodies,

the government should assess the actual needs. The overall objective should be to obtain independent advice and facilitate coordination among existing bodies. Where, for example, a body designed to advise as to environment and natural resources management is already in place, it may be unnecessary to create an additional agency to advise on wildlife. This, however, may sometimes happen simply to meet the ambitions of certain sectors of the administration. Depending on the circumstances, it may be preferable to maintain a single forum or there may be valid reasons to establish a new body, such as the inadequacy of the existing body, the need to advise two different ministers or the desire to obtain independent advice. Overall, the government should have an appropriate justification for having more than one body, a justification that goes beyond simply meeting the aspirations of ambitious administrators.

Rather than forming a new body, the law may require **consultation among existing agencies** before they act. For example, in the United States, the Endangered Species Act requires all federal agencies to consult with a federal wildlife agency before approving, funding or carrying out an activity that might affect a threatened or endangered species (16 USC 1536). In most cases, the consultation is quick and informal, consisting of little more than a telephone call to determine whether any protected species or habitats are present on the site of the proposed activity. If the latter is the case, the consultation process can become more formal, involving an analysis of the project, investigation of alternatives and stipulation of protective steps. Agencies generally comply with the consultation requirement because the Endangered Species Act allows citizens to sue the government to stop activities in violation of the act, and consultation helps the agencies avoid such problems. Also the EIA process creates opportunity for inter-agency review of proposed actions. In the United States, for instance, the President's Council on Environmental Quality oversees the EIA process, and the Environmental Protection Agency must review every environmental impact statement (42 USC 7609) (see section 5.4 below).

Another means used to prevent friction between environmental and sectoral institutions is to foresee the creation of **environmental units** within the various government sectors. This is done in Burkina Faso, where an environmental unit must be established within each ministerial department at the central and regional level (Decree No. 2008-125/PRES/PM/MECV), as well as in Ethiopia, where every government agency must also include an environmental unit, and regional environmental agencies must also be

created (Environmental Protection Organs Establishment Proclamation, articles 14–15). This solution may prove useful in creating an internal learning and collaboration process, without creating additional external coordination structures.

Coordination between different levels of government is also critical, particularly in federal countries or highly decentralized countries. The law may simply include some general clauses to this effect. In Peru, the Regulation to the Wildlife and Forestry Law requires national and regional wildlife authorities, as well as the Environment Ministry, to coordinate their action (article 11). There is, however, no specific mechanism for coordination.

Alternatively, the law may provide for the creation of a permanent forum in which local and central authorities can coordinate their action. In Argentina, for instance, coordination takes place within the Federal Council for the Environment, an organ established by agreement among provincial governments for the discussion and development of coordinated environmental policies between the federal government and the provinces (General Environment Law, Annex I, Constitutive Document for the Federal Council on the Environment). Similarly, in Bolivia a Wildlife Advisory Council advises the General Direction on Biodiversity on the approval of management plans for wildlife species. The council is a consultative organ integrated by national wildlife authorities and national CITES authorities, as well as national herbaria and fauna museum collections, and those provincial or local authorities relevant to the species under consideration (1999 Decree on Sustainable Wildlife Management Plans, articles 1–5).

These *fora* may also be created as administrative initiatives that may not necessarily be backed by the law. In Canada, in 1988 the Wildlife Ministers' Council of Canada founded the Recovery of Nationally Endangered Wildlife – a national recovery program involving three federal departments (Environment Canada, Fisheries and Oceans Canada and Parks Canada Agency) provincial and territorial government agencies, wildlife management boards authorized by a land claim agreement, aboriginal organizations and interested individuals for species at risk. The objective of the recovery program is to prevent the extinction of endangered species.⁷³ In addition, the Accord for the Protection of Species at Risk in Canada formed the Canadian Endangered Species Conservation Council, made up of provincial and

⁷³ See www.ec.gc.ca.

territorial wildlife ministers and responsible for preventing wild species from becoming endangered. The council is co-chaired by the Minister of the Environment and the minister from the host province or territory.⁷⁴

Rather than necessarily using the law, another option is concluding institutional agreements to ensure coordination between central and local government. In Australia, for instance, an **intergovernmental agreement** was adopted in 1992 to facilitate a cooperative national approach, better define the roles of the respective governments, and reduce the number of disputes between the Commonwealth and the states and territories in environmental matters. In accordance to the agreement, each level of government has responsibilities for the protection of fauna and habitats, and ensuring the survival of species and ecological communities. States have primary responsibility in the general area of nature conservation, but the Commonwealth has a particular responsibility in relation to management of areas within its own jurisdiction, obligations under international law, including CITES, exports, imports and quarantine, and cross-jurisdictional coordination. When making environmental management and resource use decisions affecting rare, vulnerable and endangered species, all levels of government should consider a national approach. Cooperative activities are promoted for native species and habitats occurring in more than one jurisdiction, as well as for improved intergovernmental arrangements for regulating commercial use of native wildlife including setting of nationally sustainable harvesting levels, establishment of national standards in marketing of wildlife products, and streamlining of permits, regulatory controls and enforcement. Management of parks and protected areas is largely a function of states (Tsioumani and Morgera, 2010).

Box 3-2: Legal options for institutional cooperation

- Whenever more than one authority is involved in a decision-making process, include provisions mandating coordination, or preferably institutionalizing it by making it part of decision-making procedures. In addition, as complete separation of functions is rarely possible in the environment and natural resource sector, it is advisable to include requirements for coordination in all laws addressing this sector;

⁷⁴ See www.scics.gc.ca.

- spell out in detail in which cases or on which matters institutional coordination should be sought;
- define the procedures or mechanism through which coordination can be achieved, for instance by:
 - creating a duty to exchange information on matters of common concern, and/or request the prior consent or advice of interested government bodies;
 - setting up joint decision-making procedures,
 - creating a coordination body composed of government and possibly non-governmental representatives;
- exercise caution in the creation of additional institutional coordination bodies, when others already exist in broader or closely related areas;
- ensure effective coordination mechanisms also among entities pertaining to different territorial levels of governance, to avoid duplication of work or contradictions between the central and decentralized authorities, as well as mutual learning among decentralized authorities.

3.3 Guaranteeing public participation in wildlife-related decision-making

History has demonstrated that "command and control" approaches in natural resources law seldom provide complete solutions. Encouraging positive behaviour may be more effective in ensuring sustainable wildlife management. Without involving local people and giving them a significant stake in the management of wildlife resources, efforts to ensure sustainable use will often be futile. Absent such incentives, local people have little reason to comply with the law or prevent violations by outsiders, including government officials themselves. This is reflected in the Addis Ababa Principles and Guidelines, which call for "recognizing the need for a governing framework, consistent with international laws, in which local users of biodiversity should be sufficiently empowered and supported by rights to be responsible and accountable for the use of the resource concerned."⁷⁵

International standards for sustainable development and environmental protection emphasize the need for public participation. The assumption is

⁷⁵ Addis Ababa Principles and Guidelines, practical principle 2.

that greater public participation can improve the quality of decisions, improve the public's respect for those decisions and improve public perception of government. Drafters, however, should remember that perceptions may vary among stakeholders, depending on the level of consultations. Thus, the law should encourage public participation both at the central and at the local level, particularly involving rural communities.

Government officials may initially see provisions on public participation as burdensome, worrying that an avalanche of comments will slow plan adoption or regulatory reform. Such fears are usually exaggerated and, as noted above, the process can serve pragmatic purposes. Another reason for governments' scepticism is the fear of losing power, although a participatory process does not undermine the government's role in balancing (and prioritising) competing interests. It rather demands transparency, i.e. that the government justify decisions in light of public concerns. Participation thus brings more legitimacy to the decision-making process, and may lead to a better public image of decision-makers and to better decisions.

Wildlife legislation, like all natural resource management laws, can contribute to the creation of transparent decision-making. The appropriate means of achieving this transparency will certainly vary depending on the resource, the managing authority and local traditions. Even when public participation provisions exist in the law, these may be difficult to apply because they have been framed in general terms, without a specified process for fulfilment. However, a number of sub-principles within this subject have been accepted internationally in the context of the Aarhus Convention and can effectively inspire national legislators. The following options will indicate how wildlife legislation can support public participation and be framed to ensure its immediate application, despite delays in enacting implementing regulations.

The law can encourage or require public participation to varying extents. A minimal approach would be to require authorities to take into account interests of stakeholders (particularly potentially impacted individuals or groups). Another approach would require that authorities consult stakeholders before making certain decisions; another would be to create a permanent body in which members of the public participate in the decision-making on a systematic basis. The devolution of legislative or administrative powers from the central to the local level can also allow people to be more directly involved in wildlife-related decision-making, although there is the

risk that this may benefit corrupt local officials. These options can be complementary, and the law can require more than one.

In some instances, legislation may create a **general obligation for certain authorities** to engage stakeholders in decision-making. This is the case in Burkina Faso, where the National Protected Area Service is in charge of developing partnerships between state, local authorities, civil society and the private sector in relation to forest and wildlife resource management (Decree No. 2008-171/PRES/PM/MEF/MECV/MAHRH, article 1(2)). Similarly, Sudan's National Forests and Renewable Natural Resources Corporation is to "encourage effective popular participation" (Forests and Renewable Natural Resources Act, articles 4 and 7). The degree to which these provisions determine the involvement of non-government actors is basically left to the discretion of the administration, and depends on the administration's effectiveness to implement the legal requirements. They may not, therefore, result in significant stakeholder empowerment, as there is no legal certainty that public participation will systematically occur.

More often, wildlife legislation – or sometimes general environmental laws – ensures that non-governmental stakeholders are necessarily represented in **advisory councils** and management commissions, as pointed out in the previous section. The composition of bodies including representation of various institutions is thus extended to members of the public representing various sectors of society. As advisory council members, stakeholders may take part in wildlife planning and decision-making both at the central and at the local level, as appropriate. These arrangements thus serve a double purpose: they facilitate inter-institutional coordination when mandates related to wildlife management are shared among different authorities, and they also constitute a permanent avenue for stakeholder participation in decision-making. Where participatory mechanisms ensure ample representation, they may significantly contribute to supporting the interests of the less advantaged members of society. In various cases, where representation is not envisaged or only loosely required, existing provisions could be strengthened to this effect.

In the Central African Republic, a Higher Council for Hunting may be involved in matters relating to wildlife management, and is made up of twelve members, of whom six must represent hunting interests as well as the general interests of the public. Among the latter, two must be members of the legislative assembly, designated upon a proposal of its president

(Law No. 62-343 of 1962, article 4). In Cameroon, a Consultative Commission on Environment and Sustainable Development should include three representatives of non-governmental organizations (Decree No. 94-259/PM of 1994, article 3). In Mauritius, a Wildlife and National Parks Advisory Council advises the minister on any matters related to wildlife (Wildlife and National Parks Act, article 3). In addition to the ten members from various environment-related government agencies, the remainder of the council is appointed by the relevant minister and comprised of two members of the public with wide knowledge of the natural resources of Mauritius; one person involved in tourism or outdoor recreation in Mauritius; and three persons actively involved in wildlife conservation or environmental protection.

Brazil's National Environment Council not only includes representatives of federal and state entities but also representatives of non-governmental organizations, indigenous organizations, civil society and environmental associations, the private sector, and workers unions (National Environmental Policy Law, article 7). In France, the National Office for Hunting and Wildlife comprises 22 members, of which at least half represent hunters' associations, government entities in charge of natural sites and forests, farmers and foresters' associations, environmental protection organizations and wildlife experts (Environmental Code, article R421-8).

Overall, it is common to find environmental NGOs or private sector representatives in multi-stakeholder bodies, due to their direct interest and higher degree of awareness and capacity to participate, rather than the community representatives who have a more diffuse interest in these matters. Ensuring that local communities – other than through elected municipal authorities – enjoy fair representation in multi-stakeholder bodies is always a complex task. Communities and individuals may contest the legitimacy of representation, especially when dealing with wide territories. Some legal options in that respect emerge from a comparative analysis. The governing body of the Uganda's Wildlife Authority is a Board of Trustees that must include not more than fifteen members, respectively representing local communities residing in areas with wildlife (five members), the private sector (two members), the tourism industry (three members), the scientific community (two members), and other communities or institutions recommended by the board itself (two members), in addition to *ex officio* members from concerned government sectors (Wildlife Act, section 8). Zambia's Wildlife Authority has nine members, two of whom must be chiefs

of community resources boards and one of whom must have wide commercial experience in the private sector (2001 amendment of the Wildlife Act, Schedule).

The selection of non-governmental representatives in multi-stakeholder bodies is a specific issue that legislators should address, as this provides an additional layer of guarantees for legitimacy and local empowerment. In Bangladesh the National Biodiversity Authority comprises representatives of the public sector, scientists, women's organizations, environmental NGOs, and representatives of local and indigenous communities. The authority itself selects community representatives, based on a defined set of criteria (Biodiversity and Community Knowledge Protection Act, article 11). In this case, therefore, the selection is top-down, but at least the law provides for certain pre-determined selection criteria to be applied to ensure some legitimacy in the choice.

There may be then provisions specifically ensuring a **bottom-up approach in the selection of members**. The law may require the government to advertise open positions and set out selection criteria. Interesting examples include the legislation of South Africa, which specifically requires the advertisement of membership openings in environmental advisory bodies, rather than empowering a government official to appoint members in a top-down manner (National Environmental Management Act, sections 3–4). Provisions of this type can be useful in promoting equitable access to representative bodies, at least providing an opportunity for presenting one's candidature to the body rather than leaving it completely to the administration to make the selection.

In New Zealand the Conservation Authority consists of five members appointed after consultation with the ministers of Maori Affairs, Tourism, and local government; one appointed on the nomination of the tribal council representing the Maori people of the southern islands of New Zealand; three appointed on the recommendations of the Royal Society of New Zealand, Royal Forest and Bird Protection Society, and Federated Mountain Clubs; and four appointed from public nominations, in accordance with a specified process (Conservation Act, section 6D). In Mexico's consultative multi-stakeholder organs, which include public administration officials, representatives of research institutions, NGOs, business and producers, and social organizations, council members are self-selected by representatives of the different stakeholder groups, and conditions for participation as

representatives of each group are published in the authorities' website (SEMARNAT, *Bases para la convocatoria para el Consejo Consultivo sobre vida silvestre* 2009-2013).

As important as a bottom-up selection of non-governmental representatives in multi-stakeholder bodies are guarantees for the transparent and justified removals of these representatives from such bodies. The law needs to limit the reasons for which the government can remove stakeholder representatives from the panels. At least, the law should require the relevant authority to give a public explanation of the removal.

It can be noted that protected area legislation often addresses local participation better than general wildlife legislation. With protected areas, nearby communities are easier to identify and include. Examples of community participation are more common and targeted. For example, Bolivia has Protected Area Management Councils, which have a say on all proposed activities within protected areas, support control and enforcement of regulations, and oversee the implementation of management plans. The protected area director evaluates the different socio-cultural groups in the area, as well as municipalities, provinces and other public or private institutions involved in the protected area's management, and then requires each relevant stakeholder to name a representative (Protected Area Regulation, articles 47 and 50). Along the same lines, Costa Rica has Regional Conservation Areas Councils (CORACs), which advise on the management of each specific conservation area and include representatives of local community organizations. The government must publicly invite any organizations interested in participating in a CORAC to register prior to its constitution, and each sector elects its own representatives (Costa Rica Regulation to the Biodiversity Law, articles 30–31).

Certain legal provisions may specifically target the inclusion of **indigenous communities**, thus allowing the integration of **traditional knowledge** in wildlife-related decision-making. In India, the Board for Wildlife consists not only of government officers, but also of three NGO representatives, ten persons to be nominated by the state government from among eminent conservationists, ecologists and environmentalists, including at least two

representatives of the Scheduled Tribes.⁷⁶ The board advises the state government with regard to the selection of areas to be declared as sanctuaries and national parks and their administration; policy formulation for wildlife conservation; amendments of the Schedules of the Wildlife Protection Act; measures to be taken for harmonizing the needs of tribal and other forest dwellers with wildlife conservation; and any other matter on wildlife protection (Wildlife Protection Amendment Act, section 5). In addition, the National Tiger Conservation Authority consists not only of ministries and parliament representatives, but also of eight experts or professionals having prescribed qualifications and experience in conservation of wildlife and welfare among people living in tiger reserves, out of which at least two must be from the field of tribal development, and six chief wildlife wardens from the tiger reserve states in rotation (2006 Amendment of the Wildlife Protection Act, section 38L).

In Canada, the National Aboriginal Council on Species at Risk consists of six representatives of the aboriginal peoples, selected by the relevant minister upon recommendations from aboriginal organization. The role of the Council is to advise and provide recommendations to the minister and the Committee on the Status of Endangered Wildlife in Canada (Species at Risk Act, section 8).

Along similar lines, in Australia, an indigenous advisory committee is established, with members to be appointed by the relevant minister. All committee members are indigenous Australians and are selected on the basis of their expertise in indigenous land management, conservation and cultural heritage management (Environment Protection and Biodiversity Conservation Act, section 505A). In the Philippines, the National Commission on Indigenous Peoples has been established to promote and protect the rights of indigenous peoples and the recognition of their ancestral domains and their rights thereto. It is composed of seven commissioners belonging to indigenous peoples from seven different ethnographic areas, at least two of whom should be women. The commission is to set up its own additional consultative body consisting of traditional leaders, elders and women and youth representatives (Indigenous Peoples Rights Act, sections 38, 40 and 50).

⁷⁶ The term "Scheduled Tribes" refers to specific indigenous peoples, recognized in India's constitution (article 342), generally characterized by geographic isolation, distinctive culture, language and religion, and increased poverty.

These specific provisions supporting participation by indigenous and local communities and consideration of their traditional knowledge in decision-making may be particularly useful in instances in which past trends of exclusion of those closer to the resource and usually poorer need to be reversed. To this end, support and culturally appropriate means to meaningfully engage indigenous and local communities should be mandated to ensure that indigenous and local communities are effectively informed of their participatory rights and able to put them into practice.

If the law's provisions on stakeholder participation are poorly drafted, actual participation of users, environmental NGOs and local communities may be in fact restricted. The law can, for instance, put too much emphasis on formal knowledge. For example, the Board of Trustees of the Kenya Wildlife Service must include some persons "who are conversant with nature conservation in all its aspects" (Wildlife Conservation and Management Act, article 3B). The law can give the appointing officer too much discretion. In Congo, the creation of "specialized associations" to advise on wildlife policy is "encouraged" at the national, departmental and local level (Wildlife Law, article 3). Thus, their creation is only an option rather than an obligation. Despite the variety of functions with which the associations are endowed, the law does not go into any further details as to their composition and operation. In the case of Malaysia, legislation simply states that the National Parks Advisory Council must consist of representatives of government departments as well as six "other persons" to be appointed by the minister (National Parks Act, article 5).

Public participation may also have limited effect if the governmental officials on a panel far outnumber the non-governmental representatives. This happened in the Interdepartmental Committee on Environment, Nature Conservation and Tourism of the Democratic Republic of Congo, established by legislation of 1975, in which, alongside delegates of numerous government departments, only two representatives of travel agencies were required to participate. In the same country, more recent legislation has taken a more participatory approach, establishing the Forestry Advisory Council, which besides some twenty representatives of ministries, includes two academics experts in forestry law, four representatives of professional associations, four representatives of NGOs and one representative of local communities from each provincial council. The law creates provincial forestry advisory councils with a similar membership (Decree No. 08-03, article 4).

Multi-stakeholder advisory bodies established at the central and **local** levels may have different functions. At the central level, functions usually entail providing advice concerning national plans, programmes and draft legislation. At the local level, advisory bodies may be more involved in local management planning and authorization processes. In Mozambique, for instance, local management councils are composed of representatives of local communities, the private sector, as well as associations and local authorities for the protection, conservation and promotion of the sustainable use of wildlife and forest resources. These councils are required to examine requests for wildlife use, ensure that wildlife use contribute to the enhancement of the quality of life of local communities, ensure conflict resolution, propose improvements to wildlife legislation, control forest fires and issue directives for the preparation of management plans. In addition, they may provide advice to the ministries of Agriculture and of Tourism and request the withdrawal of a project when it may undermine rural development or the sustainable use of wildlife and forests (Wildlife Regulation, article 97). In Mali, hunting councils with consultative functions are to be created at the national level as well as within local authorities, but their composition and functions remain to be determined, as the law leaves this to regulations (Wildlife Law, article 95).

In New Zealand, conservation boards focus on a defined geographical area⁷⁷ for planning and providing strategic direction, including recommending the approval by the authority of conservation management strategies, and then advising on their implementation. Every board consists of no more than 12 members appointed by the minister following a public nomination process, having regard to the particular features of land administered by the department in the area of the board's jurisdiction and interest in nature conservation, natural earth and marine sciences, recreation, tourism, the local community and Maori perspectives. Before making any appointment representing the interests of the Maori, the minister must consult with the Minister of Maori Affairs (Conservation Act, section 6).

As these examples show, there is a variety of on-the-ground functions that may be performed by multi-stakeholder bodies at the local level. It is thus important for legal drafters not to limit public participation at the central level, particularly taking into account that relevant stakeholders may find it easier to participate in decision-making processes that are closer to their area of residence and to the relevant resources. In many cases, granting

⁷⁷ See www.doc.govt.nz.

jurisdiction to regional authorities to oversee management plans is considered a step towards local access and participation. However, this is not always the case. Peru's report to the Vicuña Convention in 2008, for example, notes that the current redesign of the environmental institutional framework to favour decentralization has generated opposition by communities managing vicuñas, who claim that their participation in the management of vicuñas is being reduced in favour of regional authorities (Aguilar and Morgera, 2009).

Overall, there is generally little in legislation about multi-stakeholder bodies' procedures. The following are some of the questions that legislators should try to address at the level of secondary legislation or statutes of these multi-stakeholder bodies. How to ensure that the panels actually meet? How to ensure that officials listen to the panels? Are panel meetings public events? Do the panels have to publish minutes? Do panel members have to disclose their interests in the sector? Do the panels report the individual thoughts of their members or do they make group findings? If so, how – by vote? By consensus? Do they report in writing? Do they have the power to decide what topics they will discuss, or do they simply respond to questions that the government decides to ask them? Sometimes the answer to that depends on who serves as chair: a high government official or a citizen. Does the government give the committee any funding or staff? The US's Federal Advisory Committee Act (5 USC app.), for instance, requires most advisory boards to meet in public session (with exceptions for boards advising on topics like national security). The public must be allowed to see the agenda and background material provided to the board, and must have an opportunity to present oral or written statements to the board. The board must keep detailed minutes and publish them. The minutes must state which members actually attended the meeting.

Other mechanisms for public participation in wildlife-related decision-making, besides the creation of multi-stakeholder bodies, may include: requiring the government to give notice of proposed actions; holding public hearings on proposals; inviting the public to submit comments on proposals; requiring agency actions to follow EIA processes that include opportunity for public participation; and empowering citizens to sue to challenge abuse of authority. Canada permits access to government information regarding wildlife matters through the Access to Information Act (R.S., 1985, c. A-1). Public comments regarding endangered species are invited on the website – Species at Risk Public Registry – on which individuals may review Canada's

strategy and legislation for protecting endangered species and submit comments in this regard.⁷⁸

Also in the US, the Sunshine Act (5 USC 552b) requires that meetings of all federal commissions or formal agencies, headed by more than one person, be open to the public. This has limited application though as some agencies, such as the Fish and Wildlife Service and the Environmental Protection Agency, are headed by one person (Wilcox 2001). Brazil's Environmental Impact Assessment Resolution establishes that environmental impact assessments are public even while subject to technical consideration (article 11). The Resolution of Public Hearings further requires that public hearings be organized when interested parties express an interest in being informed of the EIA underway. Environmental associations or groups of at least 50 citizens may request public hearings (article 2).

Box 3-3: Legal options for participation in decision-making

First of all, the law could identify the **subject areas** where public participation is considered critical. These could include:

- management planning exercises directly affecting wildlife (i.e., plans for specific species) or related to wildlife habitat conservation (i.e., forestry, national parks, wetlands, etc.);
- listing and delisting of species under national endangered species legislation and under hunting laws;
- development and amendment of hunting regulations;
- opening and closing of hunting areas;
- allocation of hunting concessions (regardless of whether these are government or private concessions);
- creation and renewal of community-based hunting agreements (these may concern individual members of communities, households, the community as a whole);
- all scientific data related to wildlife, including population studies, study methods, results from hunter return forms, numbers of and types of permits issued, estimated harvest levels for specific areas, etc);

⁷⁸ See www.sararegistry.gc.ca.

- annual setting of hunting quotas (with the requirement that the scientific authority use the best available scientific information);
- accounting of all hunting revenues; and
- legal proceedings related to any of the foregoing or any violation of hunting and wildlife management legislation.

Then, wildlife laws should provide the minimum requirements for **public participation in wildlife-related decision making**, both at the central and local levels. Several options can be taken into account in this regard:

- regular admittance of the public to government meetings: the law may simply allow the public, or relevant stakeholders, to participate in government meetings called for wildlife-related decision-making;
- legally mandated consultations: the law may establish a duty for public authorities to use a public notice and comment period prior to the adoption of a wildlife-related decision. These consultations may be convened at the central and/or local level, depending on the foreseen effects of the decision to be made.

This will entail:

- the publication of proposed rules or decisions;
- publication of information on the process for receiving and reviewing comments at a reasonably early time;
- the obligation for public authorities to take into account the comments received; and
- the obligation for public authorities to provide reasons in writing about the decision made, to allow public scrutiny over how comments have been taken into account;
- establishment of a permanent multi-stakeholder body: the law may create an *ad hoc* body to allow ongoing public participation in wildlife decision-making as well as monitoring decisions implementation. One such body could be simply advisory, or rather a managing or decision-making entity;
 - in either case, the law should provide guidance as to its powers and placement in the government structure and composition, possibly ensuring a balance between government and non-government representatives;
 - the law should ensure that representatives of local and indigenous communities, as well as traditional users are also included in these bodies;

- the law should put in place transparent and bottom-up procedures for the selection of non-governmental representatives;
- the law should establish the obligation for the authority to consider and respond to the advice of this oversight body;
- multi-stakeholder bodies should be established at the central and local levels.

3.4 Public access to wildlife-related information

Public access to wildlife-related information is a pre-condition for effective public participation. To ensure public access, it may be sufficient to reference general legislation that provides for such access and to identify the additional requirements and procedures applicable to wildlife-specific subjects as necessary.

In the US, for instance, access to information is provided through the Freedom of Information Act (5 USC 552), which enables citizens to obtain documents and records from the federal government, including government information on wildlife. In Georgia, the Law on Wildlife states that individuals and legal entities have the right to receive exhaustive, transparent, objective and timely information (article 14).

Most countries in Latin America provide general principles on public access to information related to wildlife, however few specific rules guarantee that these rights are effectively exercised in practice. Countries have specific provisions in general legislation on environmental protection granting access to environmental information, with varying degrees of stringency in terms of the timeliness of responses from the administration. Guatemala has a law regarding access to information that allows all citizens to request environmental information from authorities and establishes that citizens should receive a response within 10–20 days, depending on the complexity of the matter (Access to Public Information Law, article 42). In Peru, the General Environment Law defines the public information duties of all authorities in charge of environmental matters, requiring that transparent mechanisms be established to guarantee the right of access to environmental information (article 42).

Overall, if general environmental legislation does not address the point, sustainable wildlife laws should then spell out modalities to facilitate public access to information specifically related to wildlife. Drafters should set out specific procedures in legislation to guide authorities in implementation and provide the public with certainty about their rights.

Box 3-4: Legal options for access to information

- Establish a public right to access wildlife-related information: this requires a mechanism by which concerned citizens can obtain upon request information in an easy, adequate and timely fashion. The law, therefore, needs to:
 - spell out how the information should be requested (from which public authority information can be obtained or where the information is deposited);
 - provide for minimal fees or exemptions from fees to obtain the information,
 - specify the grounds for refusing information (for example, the government should not have to release information that would benefit poachers) and maximum timelines for providing the information requested,
 - set penalties for improperly withholding information, and/or
 - create judicial mechanisms for challenging denial of requests;
- create a duty to inform the public: alternatively or in addition to the right to access information, the law can impose a duty to inform the public upon wildlife authorities. Thus, the law can require as a matter of routine the publication of certain types of information whether or not requested by the public. In this case, the law needs to specify:
 - what kind of information should be made public,
 - in what forms and in what timeframes information should be made public, and
 - which public authority is responsible for informing the public.

Source: partly inspired by Aarhus Convention, Article 4.

3.5 Public access to wildlife-related justice

Access to justice is one of the pillars of legal empowerment. It increases accountability and protects rights, including public participation rights. Article 9 of the Aarhus Convention deals with access to justice. It states that the public should have access to administrative and/or judicial procedures to challenge illegal acts and omissions relating to the environment. This includes the right to challenge official acts, including denial of access to environmental information (see chapter 1 above).

Legislation should assure access to justice both against private persons and public authorities in wildlife-related matters. Further, the legislation should draw the bounds of official powers clearly, so that the courts or administrative reviewers have standards to apply. General environmental legislation may well serve this purpose, but there are also examples of wildlife-specific provisions in this regard.

Usually, laws simply refer to the general means for dispute resolution, but stakeholders may need more specific provisions to ensure a fair and efficient process for resolving disputes not only between users, but also between users and government entities. A right to challenge government decisions at administrative and judicial levels functions as a public accountability mechanism over the wildlife regulatory system. In addition, the law can set up alternative dispute resolution mechanisms not only for the resolution of conflicts but also for their prevention. For example, mediators can help communities and wildlife agencies negotiate general agreements concerning protected area management or enforcement before specific conflicts arise. These mechanisms have proven preferable for the poor because they are more accessible than courts, affordable, more easily understood and (often) effective (Commission on Legal Empowerment of the Poor, 2008b).

In some instances, legislation may empower citizens to submit a **complaint** or request an injunction for violations of wildlife laws. This is the case of Swaziland, where any person may request in writing the authority to investigate alleged violations of environmental legislation, or sue for damages, an injunction, or protective order with regard to acts or omissions that contravene environmental laws, whether or not that person has been affected by the violations (Environment Management Act, articles 56–57). However, the court cannot award costs or damages when finding that the motivation for the filing of an action was other than for the protection of the environment. Along

similar lines, in Angola (Environmental Law, article 23) and Mozambique (Environmental Law, article 22), members of the public also have a right to request an injunction when their environmental rights may be infringed. In Bangladesh, legislation clarifies that any citizen or community may challenge decisions of the wildlife management authority. In addition, individuals and communities have legal standing to bring public interest litigation before the Supreme Court when their rights related to biodiversity are allegedly violated by any other individual, community, legal entity or by the state or state agency (Biodiversity and Community Knowledge Protection Act, article 19). In Bolivia, all individuals have a right to present claims for wildlife law violations, and establishes that the government must respond to petitions within 15 days from their submission, further to a public hearing. Challenged decisions may be suspended through an appeal (Environment Law, articles 93–94). Similarly, in Mongolia, citizens have a right to bring claims for compensation against the person responsible for damage to their property or health resulting from an adverse environmental impact, as well as to commence legal action against persons whose conduct may cause an adverse environmental impact or jeopardize the enforcement of environmental protection legislation (Environmental Protection Law, article 4(1)–(2)).

Often, regrettably, legislation stops at general formulations. In Lao PDR, on the other hand, the procedure whereby any individual or legal entity may send petitions or complaints about any undertaking that has negative environmental impact, is spelt out in detail. The petition should be addressed to the local authority or the environmental management and monitoring unit of the area where the damage occurs. The responsible agency has the duty to consider the issue within 30 days of receiving the complaint. Urgent issues are addressed immediately. When local authorities or responsible sectoral agencies cannot resolve the issues, they have to report to the next higher level in their chain of command or to the higher environmental management and monitoring agency, within 7 days. The responsible agency has the duty to resolve the petition or complaint within 30 days and to notify the petitioner of the result. Such procedural guarantees are very significant in empowering the poor and making authorities accountable for actually ensuring access to justice (Environmental Protection Law, article 25).

Provisions on standing vary. In the US, the public has **standing** to sue for destruction or injury to certain species of wildlife, in contravention of federal wildlife laws. To this end, a citizen must show injury to him or herself, not on behalf of the environment itself, causation and redress ability (*Friends of*

Earth, Inc. v. Laidlaw Environmental Services, Inc., 528 U.S. 167 (2000)). Redress of an injury can occur in the form of a sanction that effectively abates that conduct proving injurious to the environment. However, the Endangered Species Act provides a clear exception to this rule, providing the right to any private citizen to commence a civil suit on his or her own behalf to enjoin any person, including any governmental instrumentality or agency, from engaging in certain activities in violation of any provision of the act (16 USC 1540). In Canada, standing is afforded to individuals wishing to enforce acts that protect wildlife. For example, under the Species at Risk Act, any person who considers that there is an imminent threat to the survival of a wildlife species may apply to the Committee on the Status of Endangered Wildlife in Canada for an assessment of the threat for the purpose of having the species listed on an emergency basis as endangered. In addition, individuals have standing to bring an environmental protection action when the Minister of the Environment has failed to conduct an investigation of a violation of the Environment Protection Act within a reasonable time. The individual can seek a court order for a party who has violated the act to correct or mitigate any harm to the environment or wildlife (Canadian Environmental Protection Act, section 22). The US Endangered Species Act also has a citizen suit provision that allows a citizen to enforce the act's taking prohibitions in court. The citizen must give the violator and the government 60 days notice. Citizens cannot sue if the government is already diligently prosecuting the violation (16 USC 1540(g)).

Most countries in Latin America also recognize citizen standing for violations of wildlife legislation. Sometimes these rights are even recognized at the constitutional level. For instance, according to the new Constitution of Ecuador, Nature or *Pacha Mama* itself has a right to exist and carry on its essential processes. Individuals, communities and peoples have standing to demand that public authorities respect nature's rights (article 71). In addition, every citizen or group of citizens has a right to be heard in civil or criminal proceedings that arise from violation of environmental laws, even if their own rights have not been affected (Ecuador's Environmental Management Law, article 42). Alternative – non judicial – ways to present claims include Brazil's wildlife-related free-toll number ("green line") that is available for any citizen to present reports of wrongdoing regarding wildlife management in Brazil (Aguilar and Morgera, 2009). All the above examples offer an opportunity to empower the public to play a role in ensuring respect of wildlife legislation. It is important that these opportunities are adequately publicized so that individuals are aware of them and feel confident in using them.

Wildlife laws may set up **specialized tribunals** to ensure an appropriate examination of wildlife-related cases. Kenya established a Wildlife Conservation and Management Service Appeal Tribunal to determine appeals where any person is aggrieved by a decision made under the Wildlife Conservation and Management Act, including issues of compensation (Wildlife Conservation and Management Act, article 65). Similarly, in Uganda, a Wildlife Tribunal deals specifically with appeals of decisions made on the basis of wildlife legislation (Wildlife Act, sections 87–89). Alternatively, more general environmental tribunals may serve the purpose of ensuring respect of wildlife legislation. In Mauritius, an Environmental Appeal Tribunal hears appeals of decisions regarding environmental impact assessments, licences and injunction orders (Environment Protection Act, articles 53–54). Lesotho (Environment Act, sections 109–112) and Tanzania (Environmental Management Act, section 204) created special environmental tribunals to handle appeals of decisions related to natural resources management, which may impact upon wildlife management. The new Bolivian Constitution has created agro-environmental tribunals to deal specifically, among other issues, with wildlife legislation violations (article 186). Brazil, Costa Rica and Mexico have created specialized environmental prosecutors (Aguilar and Morgera, 2009).

Specialized judges may be better equipped to examine these decisions and the underlying delicate balance between environmental, economic and social issues. Naturally the degree to which these various arrangements may actually ease the position of disadvantaged members of society depends on a number of factors, such as the degree of objectivity of environmental and/or wildlife courts as opposed to ordinary courts, their geographical distribution and the cost of procedures.

Other countries use environmental **mediation** to prevent or resolve conflicts within or amongst communities and/or public authorities. In Madagascar, environmental "mediation" is a negotiation process that must be undertaken when a community first requests to be recognized. The law also requires negotiation when more than one community applies for natural resource management. Resort to an "environmental mediator" is also possible to strengthen communities' capabilities before applying for wildlife management rights or to assist them on various matters relating to the implementation of the wildlife management contract or generally on sustainable utilization of resources (Law No. 96-025 concerning the local management of renewable natural resources, articles 17–23). Rules on the

qualifications and roles of environmental mediators are further specified in Decree No. 2000-028, pursuant to which mediators are expected to facilitate discussions among the various stakeholders aimed at developing common, sustainable management strategies. A 1998 law in the United States created an Institute for Environmental Conflict Resolution. The institute maintains a roster, searchable online, of individuals trained and experienced as environmental mediators, including a special group of mediators who have experience with indigenous communities. In Peru, instead, the General Environment Law calls upon authorities to foster specific mechanisms for dispute settlement including conciliation and arbitration to resolve environmental conflicts (articles 151–152).

In the absence of specific provisions, wildlife laws should include general provisions regarding the right to appeal administrative decisions, even where such rights are provided for in other legislation. In all events, public authorities should have a duty to inform users, particularly local communities, of their right to appeal and the ways in which they may exercise this right. In this respect, the law should specifically require that information regarding an appeal is clearly indicated in any administrative decision subject to same – for example, in a fine, the rejection of an application or the suspension or cancellation of a licence.

Box 3-5: Legal options for access to justice

- Provide for administrative appeals as a mechanism for the review of conduct of government officials at a higher level of the same government authority that allocated or denied certain rights. It will be necessary for the law to indicate the responsible authority and provide some minimum principles;
- allow recourse to independent administrative courts: this should be considered an additional avenue for the resolution of conflicts of interest between forest users and the authority that allocated or denied such use rights;
- provide alternative means for resolving disputes between wildlife users, besides recourse to the general court system. For example, users groups could create an internal dispute resolution system. In this case, the law should detail requirements to form a dispute resolution body, and provide for a right to appeal such decisions to a court of first instance;

- make available to local communities engaging in legal wildlife utilization dispute prevention mechanisms through arbitration, mediation, and conciliation;
- create an obligation for authorities to inform relevant members of the public of their rights of access to justice, particularly when denying or rejecting applications for wildlife management rights;
- establish detailed procedures and timelines for the consideration of appeals and complaints.

3.6 Clarifying wildlife tenure and its legal consequences

Wildlife ownership and people's rights to wildlife often determine the accessibility and form of benefits from the resource. Laws demonstrate a variety of approaches to establish ownership of wildlife and rights. Security of tenure is considered an essential element to legal empowerment of the poor, allowing them to defend themselves against violations of their rights and providing economic opportunities (UN Doc. A/64/133). In several countries, laws do not include any particular statements regarding ownership of wildlife. When they do, they either establish that wildlife is state property or part of the national heritage, that it is property of landowners or that it is simply subject to anyone's appropriation.

Wildlife is considered *res nullius* according to the Argentine Civil Code; in other words, it is subject to appropriation by anyone. Wildlife found on private land, however, is presumed to be the property of landowner, whose authorization is necessary for any use of wildlife located on the property. Wildlife in national parks is considered to be under the ownership of the federal government, although animals that wander off the limits of protected areas regain their *res nullius* status (National Parks Law, article 13). Similarly, in France, any wild animals living in a natural environment, if not considered domestic or protected, can be freely hunted as long as the hunting regulations are respected (Civil Code, article 528). Hunting on someone's land can only be practiced with the landowner's consent, which can be presumed in the absence of explicit objections by the landowner (Environmental Code, article L422-1).

When wildlife is considered part of "forest produce" (see section 2.3 above), then the tenure system of forests and their products is relevant. Along

similar lines, in Viet nam, wildlife tenure is expressly **linked with forest tenure**. The state manages and disposes of natural and planted forests and forest wild animals, allocating rights and obligations to forest owners, whereas ownership over planted production forests includes the forest owners' right to possess, use and dispose of animals within the planted forest (Forest Law, articles 3, 6 and 76).

Some countries, such as Botswana (Wildlife Conservation and National Parks Act, section 83), expressly recognize ownership of wildlife by the **owners of land** on which the animals are found or at least in some cases grant various privileges to landowners. Similarly, in Madagascar (Ordinance on hunting, articles 6–8) and Namibia (Nature Conservation Ordinance, section 28), even if ownership of wild animals is not addressed in legislation, hunting rights are reserved to the state on state land and to private owners on their property.

The grant of hunting and other management rights to land owners by principal legislation, as seen in Namibia, has often served as a basis for successful private wildlife management initiatives, even where, as in Namibia, ownership of wildlife has not been transferred to land owners. The security of rights being granted and, therefore, the clarity and stability of the legal provisions granting them, may in this case be more important than ownership of the resources. Where, instead, management rights are linked to the ownership of resources and to the land on which they are found, as in Zimbabwe (Forest Act, sections 2 and 15), a key factor becomes the security of title to the land, which may remain different between private holdings and customary communal land. In this case, the feasibility of successful wildlife management initiatives tends to rely less directly on wildlife legislation, and more on land legislation and its interrelation with land use customs.

Even when wildlife is not expressly declared to be property of the owners of land on which it is found, various laws, such as those of Burkina Faso (Forest Code, articles 4–5 and 129) and Cameroon (Wildlife Decree, articles 19–20), do recognize an **exclusive right of land owners to hunt** on their land and to exclude others from hunting unless authorized, even where wildlife is expressly declared to be state property. In Kenya, landowners have a similar right, but must apply for registration of their land if they wish to organize hunting by third parties there (Wildlife Conservation and National Parks Act, article 29). In Mauritius, where wildlife is state property if found on state land, the consent of the owner or occupier is necessary to hunt on

any other land. Even on leased state land the lessee has a right to the ownership of hunted animals, but must take certain measures to prevent illegal hunting (Shooting and Fishing Leases Regulations, articles 2 and 14).

Overall, the law may either automatically recognize private ownership of wildlife or may set conditions, such as an authorization from the state, before a person may exercise rights. In some instances, common in Western Europe, the law may set a minimum size of land as a condition for the exercise of hunting rights by landowners, or may require or encourage grouping of small land parcels (Cirelli, 2002).

Although legislation can give significant consideration to the rights of landowners, this approach is not necessarily likely to involve benefits for the most disadvantaged members of society, particularly when "private" land generally does not include **land held under customary tenure**. Where ownership of land is controversial (being for example formally state land but traditionally considered as customary land), conflicts may arise regardless of rights given to "owners". An exception is the legislation of Swaziland, which gives the residents of Swazi areas the same rights as those given to owners, lessees or managers of land to hunt small game without a licence, except in the closed season (Game Act, section 15).

Interestingly, in the Philippines, the constitution provides that wildlife is owned by the state, but the law may allow small-scale utilization of natural resources by Filipino citizens. Furthermore, the constitution mandates respect of rights of indigenous cultural communities to their ancestral lands to ensure their economic, social, and cultural well-being (article XII, sections 2 and 5). The 1997 Indigenous Peoples Rights Act recognizes the **indigenous concept of ownership**, i.e. that ancestral domains and all resources found therein serve as the material bases of cultural integrity. According to this concept, ancestral domains are the indigenous peoples' private but community property, which belongs to all generations and therefore cannot be sold, disposed of or destroyed. The concept also covers sustainable traditional resource rights. The rights to ancestral domains include rights of ownership over traditional hunting grounds, the right to develop lands and natural resources within the ancestral domain, to manage and conserve natural resources, and to benefit and share the profits from allocation and utilization of natural resources, and the right to resolve land conflicts in accordance with customary laws. Corresponding responsibilities are also detailed, such as the maintenance of an ecological balance by

protecting fauna, as are the processes for delineation and recognition of ancestral domains, giving a decisive role to the communities concerned (sections 5, 7 and 9). In Bangladesh, the rights of indigenous and local communities over wildlife that are directly linked to their livelihood practices are recognized by the state, so that access to biological wealth for survival needs and traditional uses is ensured (Biodiversity and Community Knowledge Protection Act, article 6).

The law may have special provisions governing owners of **captive wildlife**. In Japan, wildlife legislation clarifies that ownership of certain protected specimens (such as those bred), is subject to registration and carries the duty to conserve and treat them properly. In the Philippines, no person or entity is allowed possession of wildlife unless they can prove financial and technical capability and facility to maintain it (Wildlife Act, section 26). Those possessing threatened and exotic species are obliged to register them; threatened wildlife possessed without certificate of registration is to be confiscated. The obligation for registration and possession of a wildlife registration certificate was subsequently extended to non-threatened fauna species. The holder of the certificate does not have the additional right to collect animals from the wild unless granted a specific permit (Wildlife Act Implementing Rules and Regulations, rule 26(8)).

In Asia it is frequent for wildlife to be considered **state property**. In China, it is the property of the state, with the clear legal consequence that the local government will compensate for damage caused by protected species. The local government is responsible to prevent and control such harm so as to guarantee the safety of human beings and livestock and ensure agricultural and forestry production (Wildlife Protection Law, articles 3 and 14). Similarly, in Lao PDR, wildlife living naturally in the territory of the state is "the property of the national community, of which the state is the central administrative representative", so an authorization is required for the possession of specific species of wildlife (Wildlife Law, article 4). In Bangladesh, the legislation does not include clear and specific general statements on wildlife tenure, but clarifies that any wild animal, trophy or meat is presumed the property of the government until the contrary is proved (Wildlife Preservation Order, article 22). In Malaysia, the Sabah Wildlife Conservation Enactment states that all protected animals and their products are the property of the government, unless they have been lawfully imported or obtained upon a valid license or permit. In Mongolia, game is the property of the state and only unprocessed products derived from fauna

hunted or trapped according to relevant permits, contracts and agreements belong to the hunter or trapper. As a consequence, persons liable for damage to fauna as a result of a violation of the law must reimburse the state for the damage caused, the amount for such reimbursement being double the ecological and economic value determined by the government (Law on Fauna, articles 10 and 25).

In Malawi, the ownership of wild animals, as well as plants, is vested in the president, on behalf of and for the benefit of the people, but specimens lawfully taken pursuant to a licence become the property of the licensee. However, entering private land without permission is not allowed, even in the pursuit of wounded animals, which otherwise must be killed. In this case, the hunter must report to the owner, who has sole authority to decide whether to allow access (National Parks and Wildlife Act, sections 4 and 79). In Mozambique, the Wildlife Law specifies that wildlife is the property of the state. Landholders may use wildlife resources on their land for their personal consumption, but for other uses need a licence (articles 3 and 9). In Bolivia, the new constitution establishes that biodiversity is part of the state's natural wealth (article 381), reaffirming the notion that wildlife is state property that may be transferred to private parties or communities (Wildlife Law, article 2). In Costa Rica, wildlife is considered part of the state's natural wealth and the sustainable use of wildlife is considered of public interest (Wildlife Conservation Law, article 3). Although there may be a variety of approaches and degrees of public ownership over wildlife, as shown by the examples above, laws should spell out the specific consequences that arise from such tenure system.

A less common provision regarding wildlife ownership is set out in Sudan, where wildlife is **state property in specified cases**. In the first case (where an offence has been committed) this is presumably for the purpose of granting the state a right to claim compensation for damage; in the second case (where animals are accidentally killed or in self-defence) to exclude a right of persons who killed animals to the property of the animals killed (and therefore remove a possible incentive for abuses) and in the third case (where animals are found dead by any person not being the person who has lawfully killed the animal) also to prevent abuses (Wildlife Ordinance, article 22).

In the US, although not a national doctrine, courts have found that the benefits of wildlife accrue to all citizens. The government does not own the wildlife (for

example, it is not liable for damage done by wildlife, *Mountain States Legal Foundation v. Hodel*, 799 F.2d 1423 (10th Cir. en banc 1986)), however it has the power and trustee-like responsibility to regulate wildlife use for the benefit of the people. Private landowners also are merely trustees of wildlife located on their land (Sigmon, 2004). Courts have upheld the ability of states to sue private parties for money damages for unauthorized injury to the public's wildlife. Likewise, courts have held that citizens do not have the right to hunt wild game, except as permitted by the state (Echeverria and Lurman, 2003). Many states require land owners to post signs if the owners want to exclude hunters, while other states require hunters to obtain permission from land owners before hunting on their property (Sigmon, 2004).

In New Zealand, indigenous wildlife is the property of the state until it is lawfully taken or killed, when it becomes the property of the person who took or killed it (Wildlife Act, section 57; Wild Animal Control Act, section 9). This general statement is coupled with consideration of **Maori ownership** over their natural resources: the Conservation Act states that it must be interpreted and administered in light of the principle of self-management, referring to the Maori ownership and control of their lands, estates, forests, fisheries and other properties (section 4).⁷⁹

Overall, customary rights or private property rights may limit state powers over wildlife – so, for example, people wishing to hunt on private land may need the authorization of the owner (Cirelli, 2002). In some instances, however, state powers over wildlife may significantly limit the rights of landowners, who may be required by legislation to allow access of hunters into their private land (usually, this applies unless private land is fenced).

In drafting wildlife legislation, with the aim of empowering the poor, the drafter must address issues of ownership and use rights, while taking into account laws and customs governing land and possible discrimination against disadvantaged groups (for example women) resulting from them. The drafter should avoid the perpetuation of injustices. The new wildlife legislation can clearly grant specific rights to targeted groups, thus, "bypassing" any ambiguities or inequities of other legislation or practices.

⁷⁹ The 1840 Treaty of Waitangi, signed by representatives of the British Crown, and various Maori chiefs, established a British governor in New Zealand, recognised Maori ownership of their lands and other properties, and gave Maori the rights of British subjects.

Regardless of the type of tenure arrangement over wildlife, drafters should take care of clarifying the implications of the selected systems, in terms of needed permits and of recognized rights. Addressing wildlife tenure should also lead to a clarification of duties. These usually include management responsibilities and liability for damage caused by wildlife to people and property. This may not necessarily be the case (legislation may provide for general exemptions from liability), so legislation should clarify different responsibilities and their links with ownership. The obligation to compensate for damage caused by wildlife may be limited only to damage caused by protected species, or only when adequate precautions had not been taken, or to be coupled with compensation from a fund (Cirelli, 2002). Issues related to damage are also addressed in section 5.6 with specific regard to human-wildlife conflicts.

In the law, provisions on wildlife ownership may be, however, less important than **provisions entitling to benefits from wildlife use**. The grant of hunting and other management rights to citizens or communities has often served as a basis for successful private wildlife management initiatives, even where ownership of wildlife has not been transferred to private or communal land owners.

Box 3-6: Legal options for wildlife tenure

- Define clearly tenure over wildlife and its relation to land ownership, so that access and management rights and responsibilities are clearly allocated for both extractive and non-extractive uses:
 - when wildlife is considered as state property, define clearly any rights and obligations of landowners in respect to wildlife on their land;
 - when wildlife is considered private property, place certain duties upon owners to ensure sustainability of use (such as requiring the development of a sustainable management plan, regular reporting to relevant authorities, etc.);
 - give due consideration to traditional use practices of indigenous and local communities, when sustainable, enabling them to engage in lawful wildlife use;
- when the tenure system leads to the marginalization of traditional wildlife users and/or local or indigenous communities, create a specific legal basis for community-based wildlife management, and/or for sharing among local and indigenous communities living in proximity of wildlife, the benefits derived from wildlife use in state or private-owned areas.

3.7 Ensuring gender equity

Empowering the poor also includes strengthening access to opportunities for women that have been disadvantaged or discriminated by customary laws and more generally promoting gender equality (A/64/133). The Convention to Eliminate All Forms of Discrimination Against Women underlines the particular problems faced by rural women and the significant roles rural women play in the economic survival of their families, including their work in the non-monetized sectors of the economy (article 14). Some of the international environmental instruments that emerged from the Rio Conference on Environment and Development (1992) contain provisions specifically addressing gender issues. Principle 20 of the Rio Declaration states that "women have a vital role in environmental management and development", and "their full participation is therefore essential to achieve sustainable development". Moreover, Chapter 24 of Agenda 21 is specifically devoted to gender. The Non-Legally Binding Authoritative Statement of Principles on Forests calls for women's participation in the planning, development and implementation of national forest policies and in the management, conservation and sustainable development of forests (principles 2(d) and 5(b)). The preamble of the Convention on Biological Diversity recognizes women's "vital role" in the conservation and sustainable use of biodiversity, and affirms the need for their participation in policies concerning these issues.⁸⁰

References to gender issues are, nonetheless, scarce in national wildlife legislation. This may be particularly problematic when wildlife use is based upon traditional or customary systems in which women appear significantly disadvantaged due to their exclusion from decision-making or from entitlement to certain rights. In Angola, for instance, within these traditional systems that allow for free access to wildlife under the control of traditional authorities or families, women appear significantly disadvantaged, as their access to resources is often limited or precluded. This is because the allocation of areas of forests for traditional exploitation depends on decisions of the father, brother, or husband (FAO, 2008).

Some exceptions to this trend, however, can be identified. In Mozambique and South Africa, for instance, general principles embodied in the

⁸⁰ See "Gender" in FAO. 2002. *Law and Sustainable Development since Rio*. FAO Legislative Study No. 73, pp. 245–6.

environmental law (which are also applicable to wildlife management) call for guaranteeing opportunities of equal access and use of natural resources to women and men. In Zambia, instead, gender issues are addressed at the level of public participation in decision-making: legislation expressly states that membership in wildlife advisory bodies should ensure "equitable gender participation" (Forest Act, section 5). In Liberia, the legal basis for the creation of a multi-stakeholder advisory committee for forest management calls for fair representation of the interests of women and youth (National Forestry Reform Law, article 4(2)).

In the Philippines, women must be represented in a consultative body advising the National Commission on Indigenous Peoples and in the commission itself, which protects the rights of indigenous peoples and recognizes their ancestral domains and rights (Indigenous Peoples Rights Act, article 40). Similarly, in Bangladesh the National Biodiversity Authority is an autonomous regulatory body to implement legislation on biodiversity and traditional knowledge whose membership must include women's organizations (Biodiversity and Community Knowledge Protection Act, article 11).

Other legal provisions may instead focus on ensuring gender equality in the allocation of wildlife management rights. In Uganda, provisions guarantee "equitable access" for community applicants for wildlife use rights (Wildlife Act, article 32), which may be interpreted as mandating consideration of past gender inequalities. In Bangladesh the state is to pay special attention to women in the process of recognizing traditional wildlife uses reflecting livelihood practices (Biodiversity and Community Knowledge Protection Act, article 6).

Although there may be little that wildlife legislation can do to address cross-sectoral legal provisions that may discriminate against women (such as those on property and inheritance rights), the above-mentioned legal provisions may nevertheless contribute to better consideration of gender equity in wildlife management and to raise the awareness of authorities and managers in this respect.

Box 3-7: Legal options for gender equity

- Include gender equality among the objectives of wildlife laws;
- require the consideration of gender issues in wildlife management planning and decision-making and licensing/allocation of concessions;
- grant special support to women that contribute to the conservation and/or sustainable use of wildlife; and
- create mechanisms ensuring women's representation in wildlife management bodies.

Source: inspired by "Gender" in FAO. 2002. Law and Sustainable Development since Rio. FAO Legislative Study 73, pp. 245–6.

3.8 Food security

Food security concerns are occasionally addressed by wildlife legislation, particularly in provisions regarding distribution of bushmeat. In more than one country provisions call for the attribution to local populations of **wildlife meat** that might otherwise be wasted (derived from self-defence, culling or recreational hunting). For example, the Democratic Republic of Congo requires giving meat from animals killed in self-defence to local people and prohibits its sale (Hunting Law, article 37). In Cameroon, meat derived from culling expeditions or from animals killed out of necessity is to be handed over to "victim" populations and partly to hunters who have volunteered in culling (Wildlife Decree, article 62). Similarly, in Gabon, meat deriving from culling operations must be left to the local population (Forestry Code, article 196). In Congo, any hunted animal meat not used on the spot by hunters must go to the local population or charity institutions, and meat of animals killed for self-defence must be distributed in accordance with local customs (Wildlife Law, article 65). In Central African Republic, meat abandoned by hunters belongs to the villages that are the closest to the hunting places, so hunters abandoning meat must notify the first village they encounter or the first camp reached (Wildlife Ordinance, article 75). In Malaysia, legislation provides that meat of any animal killed under a sporting license cannot be sold, but must be offered to the headman of a village (Sabah Wildlife Conservation Enactment, article 52).

Draft legislation in Angola contains more systematic and elaborate provisions on food security. The draft states that one of the aims of wildlife management is contributing to food security and the wellbeing of citizens. Several specific provisions on the free distribution of meat to local communities support this objective, in the cases of wild animals killed in self-defence, seized by law enforcement officers or killed for the purposes of scientific investigation, as well as when hunters are unable to maximize the use of products from hunted animals. Furthermore, the Angolan draft legislation provides incentives for wildlife ranching activities that contribute to food security and calls upon wildlife ranchers to take into account the implications of their activities on the availability of meat in nearby communities.

Notable legal provisions are those found in Sudan where the killing of protected animals is allowed to obtain meat "in case of urgent necessity", requiring a report to authorities except if natives killed the animal (Ordinance for the Preservation of Wild Animals, article 11). As people faced with food shortages are likely to resort to any available bushmeat whether or not allowed by the law, the latter provisions can be considered more realistic and possibly more likely to encourage people to act under the framework of the law rather than outside of it.

Trade in bushmeat is sometimes specifically regulated (in Burkina Faso and Ghana, for instance), with the law generally requiring an authorization or a permit. In Kenya, the possession of, movement of, or any dealings in any such meat may be prohibited by regulation (Wildlife Conservation and Management Act, article 47). Central African Republic allows the sale of game meat after the opening of the hunting season and until thirty days after its closure (Wildlife Ordinance, article 76). In Liberia, in some communities, hunters associations reportedly make rules for hunters to ensure sustainable harvesting of bushmeat (Cirelli and Morgera, 2009b).

The CITES COP provides some guidance on bushmeat that may be useful to drafters (see chapter 1 above). In particular, it calls for improving the domestic management of CITES-listed species (appendices II and III) harvested, traded and consumed as bushmeat through a review and, if needed, strengthening of relevant informative, legislative, *in situ* conservation, monitoring, enforcement and social or economic incentive measures. More specific suggestions are incorporated in the legal options outlined below.

Further, wildlife management legislation can contribute to food security by allowing subsistence hunting practices to the extent that may be environmentally sustainable (see chapter 4 below). Legislation could include consideration of customary hunting practices – allowing them where sustainable on the basis of consultative processes, especially where they are indispensable for food security. People faced with food security needs are certain to resort to available bushmeat even if they have to violate the law. More careful consideration of their needs could bring these people under the umbrella of the law.

Box 3-8: Legal options for food security

- Make specific provision to avoid waste of wildlife meat and ensure that local communities can benefit from it;
- define clearly the administrative responsibilities of the government agencies that may be involved in, or can contribute to, the domestic regulation of trade in bushmeat and the import, export, re-export and transit or transshipment of bushmeat;
- clarify or establish property rights regarding protected species harvested, traded and consumed as bushmeat and to involve local communities in the monitoring of harvest, trade and consumption;
- review and, if needed, revise logging and other natural resource concessions to ensure that they contribute to the legal, non-detrimental harvesting of, trade in and consumption of bushmeat.

Source: partly inspired by CITES Res. 13.11.

4. MANAGEMENT PLANNING

An essential condition for sustainable wildlife management is planning: the process whereby information on the status of wildlife resources, their habitats, their interactions and their economic, social and environmental values is gathered, regularly updated (through a wildlife inventory, assessment, survey, or register/cadastre) and used for planning in time and space the objectives and actions of both wildlife protection and sustainable

use (through management plans). This fundamental approach is generally considered a cornerstone for the sustainable management of natural resources, and should be reflected in wildlife laws.

In accordance with global trends and international standards, management planning should be adaptive and science-based, implementing a precautionary approach. Chapter 1 mentioned that CITES supports an interpretation of the precautionary principle implying that in case of uncertainty, parties should act in the best interest of the conservation of the species and adopt measures that are proportionate to the anticipated risks.

Management planning should also be fair and transparent and should take into account social, cultural, religious, economic and ecological considerations affecting wildlife management. Planning should also give weight to traditional knowledge and practices. All this is necessary for allowing flexibility and balancing of general and local needs.

Management planning should not be over-regulated, but should reflect a practical approach that responds to the capacity and resources of a country's authorities. In the case of community-based management, planning might need to be simple. It should still promote rational and transparent decisions about the protection and sustainable use of wildlife: the law should be a fundamental tool to ensure that planning reaches these objectives. This is also called for by the ecosystem approach (chapter 1).

Wildlife management planning is an instrument for putting adaptive management into practice, as advocated by the Addis Ababa Principles and Guidelines⁸¹ and the ecosystem approach. Science is always increasing knowledge of wildlife, but managers may lack the perfect understanding that they would like to have. Mistakes, therefore, are inevitable. Adaptive management looks to take advantage of mistakes to help fill gaps in knowledge; it is a process of continuous learning.

Managers need to do three things to embrace adaptive management. First, managers must see or, better, shape their practices as experiments to test their knowledge of the resource. That means that sometimes they may try new things and sometimes they may try different things in different places, to compare the results. Second, managers must make a heavy commitment

⁸¹ Addis Ababa Principles and Guidelines, practical principle 4.

to monitoring and evaluation. Without monitoring and evaluation they can never know which approaches have worked, which have not, and why. Third, managers must be willing to admit mistakes and make changes based upon what they learn.

These three steps can be challenging. They require that managers, who like to see themselves as experts, admit that their knowledge is limited. They require that managers, who like to see themselves as action-oriented, commit to programme monitoring and evaluation, which some agency officials view as unimportant, low-status tasks. They require that managers take risks, admit mistakes and then change course, which some find hard to do.

Nonetheless, the law should support adaptive management. It should encourage innovation and experimentation, should require monitoring and evaluation, and should allow managers to make changes based on what they learn.

Even without a program of adaptive management, the law must allow flexibility. Natural resources, especially wildlife, are dynamic. Wildlife population levels are rarely the same from year to year, and can be affected by any number of natural and human-caused events – drought, heavy snow, disease, habitat destruction from human development, over-hunting, etc. Legal structures need to allow changes that respond to the changing resource. For example, the law should include mechanisms to shorten, extend or even cancel hunting seasons in emergencies based on new information on the status of the target population. Managers may need the same rapid flexibility for a number of other wildlife-related decisions including listing and delisting of endangered species, setting hunting quotas, declaring open and closed areas, etc.

Above all, while legislation can provide guidance (standards) for decisions, it cannot and should not try to make these decisions itself. Thus, the wildlife legal framework should spell out the basic dynamics of the process: its objectives and components, the logical sequences of steps in the process, the need for regular updating, and its legal consequences (for example, limits to quantity and to time/place for hunting). At the same time, flexibility should be embedded in the legal framework. This can be achieved through provisions that:

- first, specifically identify those decisions requiring flexibility (i.e., seasons, hunting quotas for specific species and populations, etc.);

- second, establish the framework and basis for the decision (i.e., who will make the decisions, when, using what information, and who will be allowed to participate);
- third, ensure that the implementation of decisions is monitored so as to supply new data necessary for successive adaptive decision-making;
- fourth, allow for rapid response and flexibility in emergencies, with re-evaluation and justification as soon as possible after the emergency action; and
- finally, provide for the expedient resolution of disputes that may arise, including both administrative and judicial venues where appropriate.

Specific wildlife planning requirements, however, vary greatly from one country to another. This chapter describes some existing legal approaches for information-gathering and monitoring, management planning, involvement of local authorities and stakeholders, and inter-state cooperation for trans-boundary issues and migratory species.

4.1 Establishing a system for information-gathering and monitoring

As highlighted above, the basis for effective wildlife management planning based on an ecosystem approach⁸² is accurate and updated information on wildlife resources, their status and their use, environmental and socio-economic impacts, and their interactions with their habitats and with local communities. All sources of information are relevant in deciding about resource management, although some information may be considered confidential or procted from disclosure. Science should guide the process, while allowing for consideration of traditional and local knowledge.⁸³ Managers should constantly or at least regularly update information, ensuring iterative and timely feedback. Thus, monitoring itself should change based on what one learns from monitoring. The process can also contribute to transparency, depending on how often managers collect and disclose the data to other stakeholders.

Legal provisions on wildlife surveying are diverse in scope and level of detail across the countries analysed in this study. Often there is no explicit legal basis for wildlife surveying, such as in Ethiopia, Ghana, Seychelles,

⁸² CBD Decision VII/11, Annex, para. 16.

⁸³ Addis Ababa Principles and Guidelines, practical principle 4; CBD Decision VII/11, Annex, principle 11.

Swaziland, Sudan and Central African Republic. Some counties, however, do specifically require wildlife population studies, surveys and cadastres. In Congo, for instance, legislation specifically calls for an **inventory** of forest and wildlife resources for which a "national centre" was set up (Decree No. 2002-435). In Cameroon, the Wildlife Directorate's functions include the preparation of wildlife surveys and the study of animal population dynamics (Decree No. 2005/099, articles 53–57).

More detailed are legal provisions in Liberia, whereby the authority must promote and undertake research on the distribution, habitat and population of wildlife with a view to drawing up a list of animals threatened by or in danger of extinction (Wildlife and National Parks Act, article 32). In Kenya, the gap is somehow filled by environmental legislation, which requires an inventory of biological diversity to monitor its status. Surveys may also be required for specific purposes (Environmental Management and Co-ordination Regulations). In Mozambique, the Wildlife Law defines wildlife inventory as the collection, analysis and record-keeping of data on the species composition, density and distribution to provide the basis for the sustainable management of wildlife (article 1).

In China, central and provincial forestry departments must regularly carry out surveys of wildlife resources and keep records of them to provide the basis for the planning of the protection and development of wildlife resources and the preparation of the list of wildlife species under special protection by the state or local authorities. General surveys of wildlife resources must be conducted once every ten years and approved by the competent departments (Wildlife Protection Law, article 15; terrestrial wildlife regulations, article 7). In Guyana, the Wildlife Scientific Authority must submit an annual report on any wildlife species that is endangered, threatened, vulnerable, extirpated, and extinct or at risk (Species Protection Regulations, article 7). The report must also contain a status on the enumerated species contained in Schedules I, II, III or IV to the regulations (article 7).

Terminology may vary. In Angola, the wildlife inventory is to be periodically updated and its results to be made public through a **wildlife cadastre**. Similar provisions are common in Central Asia and the Caucasus. In the Russian Federation, the law requires both a wildlife inventory and a wildlife cadastre. Similarly, in Kyrgyzstan, the Ministry of Environmental Protection is called upon to create and keep a state fauna cadastre and a state registry of

fauna. In Armenia, the government must develop procedures for wildlife surveying so that the status of wildlife in the country is reviewed every five years leading to the creation and regular updating of a wildlife cadastre. In Tajikistan, "wildlife monitoring" is defined as the observation, assessment and monitoring of wildlife and of its conditions, with the aim of preventing negative impacts on it, and is based on data provided by the state wildlife cadastre, which contains information on quantity and types of animals as well as other useful data that must be gathered by organizations and institutions (Law on Wildlife). This list of examples shows that legal provisions may clearly assign responsibility for conducting wildlife surveys, establish their periodicity and delimit their scope.

Even when legal provisions require wildlife surveys, financial and human resources to carry out these information-gathering activities are usually not available. For example, in Costa Rica, the Wildlife Regulation lists all endemic species according to their conservation status, and determines restrictions applicable to each category. Due to budget restrictions, however, the conservation status of species is not based on population studies, but rather on adaptive management strategies (i.e. experimental approaches) drawing on the opinion of collegiate bodies and experts, as well as findings from universities, NGOs and international organizations. The government requests input from communities with interest in particular species – as a matter of administrative practice, not through formalized processes (Aguilar and Morgera, 2009). Interestingly, true adaptive management would direct the country to carry out at least some of the population studies to see if the experimental approach was working.

In Argentina, management plans are most often based on indicators of population abundance, including, for example, the consideration of capture effort, size and age of specimens taken (information that is provided by users). Indicators are designed and adapted to particular species and regularly updated to ensure their effectiveness in portraying a species status. In Chile, the Agriculture and Livestock Service (SAG) categorizes species according to **census information** in the case of valuable species like guanacos, vicuñas, pumas and grey foxes. However, for many species quotas are set on the basis of historical extraction levels, as population studies are unavailable. The SAG thus improves its information and re-categorizes species and quotas as information from census becomes available (Aguilar and Morgera, 2009).

In Mongolia, the Law on Hunting regulates "**game resource management**" (GRM) – i.e. activities to develop frameworks for the sustainable use, conservation, and breeding of game by investigating and identifying game animal distributions, numbers, herd structures, fertility and game resources (article 4). Province, capital city, district and capital city district governors must ensure, within their respective jurisdictions, that GRM reports, evaluations and inventories are conducted once every four years. They are financed from the state central budget, from game use fees and from citizens and economic entities possessing or using land on a contractual basis. If hunting has been conducted for commercial purposes, game resource inventories are conducted annually. GRM reports and evaluations form the basis of activities to conserve, breed and make sustainable use of game resources.

Overall, wildlife laws should provide the basics for a system of continuous information-gathering and monitoring, and assign relevant responsibilities and establish the basic elements of the information system feeding into wildlife management planning. This is a critical way to respond to the CBD, that has highlighted the importance of information gathering and monitoring in the context of the ecosystem approach: reporting performance and results of a certain management approach is indispensable for adapting management decisions and developing responsive management capacity.⁸⁴ As described in the previous section of this chapter, adaptive management is based on active learning derived from monitoring the outcomes of planned interventions and on that basis formulating appropriate management responses.⁸⁵ On the other hand, legislators should be aware of human and financial limitations in this respect, and strive to create workable systems. One way to compensate for limited resources is that of involving the public (particularly, indigenous and local communities and wildlife users) in information gathering, thus allowing also incorporation of traditional knowledge in management planning (see section immediately below). Another useful approach is that of maximizing synergies with other information-gathering exercises (such as forest and biodiversity inventories, and other environmental surveys).

⁸⁴ CBD Decision VII/11, Annex, para. 17.

⁸⁵ Ibid, principle 6.

Box 4-1: Legal options for wildlife surveying

- Clarify how wildlife information will be collected and records kept, setting the criteria to be taken into account in the development of such records (so as to cover social, economic and environmental functions of wildlife, including impact on local populations);
- specify who at the government level is responsible for wildlife information gathering: which government entity should ensure the collection and analysis of information, the frequency and breadth of such collection and its analysis, and forms of inter-institutional cooperation as appropriate. This could entail assigning the responsibility for preparing periodic wildlife inventories or assessments covering the whole of the country's territory to a certain central government agency, and specifying how local government agencies can contribute with information gathered at the local level;
- create specific obligations for individuals that engage in wildlife conservation and/or sustainable use to provide information to a specific authority (as a general obligation, as a condition of licences and concessions, etc.);
- specify how traditional knowledge can be integrated in the wildlife information gathering and analysis process, by facilitating the participation of local communities. In this respect, in accordance with the Addis Ababa Principles and Guidelines, the law should also ensure that the approval of the holder of traditional knowledge is sought before including such knowledge in wildlife assessments and inventories;
- specify how the larger public can access information on wildlife and contribute with additional information on a voluntary basis.

Source: inspired by CBD Decision VII/11.

4.1.1 Inter-disciplinary and participatory approach

The ultimate goal of managing wildlife, as with any natural resource, is to maintain the resource so that it provides a benefit to present and future generations. To achieve this goal, managers need the **best available scientific information**. What types of studies will be required and when will depend on several factors including for example the species involved, distribution of the species in the country and in the region, types of use,

international standards, etc. The law, therefore, should not attempt to dictate exactly what science to use. The law should rather serve an important role in strengthening the use and availability of scientific information for decision-makers.

Legislation should clarify when the agency has to conduct new research to justify a decision, or whether it may have to review what is already known – existing censuses, research reports, scientific papers, texts, etc. If there are conflicting scientific views, the agency can use its judgment to decide among them. Also the law can require the agency to disclose uncertainties when it makes its decisions. In the case of high uncertainty, the law can call for increased monitoring of the effects of the decision.

The law should call for an interdisciplinary approach to wildlife surveys.⁸⁶ Wildlife is part of a complex natural system that cannot be understood if questions and concerns are looked at in isolation. For example, if managers want to understand why a given population of wildlife is decreasing, then just counting the animals will not be enough. Depending on the species, area, local and possibly even international uses and events, managers will need to study any number of factors – many of which may be outside the expertise of wildlife biologists. So, decreasing populations of wild sheep may be a function of hunting pressure (for which local knowledge may help), disease (requiring the assistance of wildlife veterinarians), or grazing pressure and competition for forage between domestic stock and wildlife (a study that can and should be aided by the expertise of rangeland specialists) – or any number of other issues.

Public participation in wildlife surveys allows different managers, users and local communities to provide useful information on the status of wildlife, based on direct observations and traditional knowledge. Various countries, such as the Central African Republic, the Democratic Republic of Congo and Kenya, require **hunters** to provide detailed information regarding wild animals to local authorities. These provisions could lead to contributions of useful information, but are probably difficult to implement adequately. Along the same lines, in Botswana, **landholders** should provide yearly reports on hunted animals (Wildlife Conservation and National Parks Act, article 22). In Angola (draft hunting regulations), licensed hunters are expected to provide

⁸⁶ Addis Ababa Principles and Guidelines, practical principle 6.

annual reports, which include both factual information on activities as well as suggestions on management measures.

Lack of resources to conduct population censuses should not detract authorities from seeking other ways to monitor the status of wildlife. Local knowledge may be particularly valuable when local use is significant and illegal trade is more difficult to document. **Traditional users** in local and indigenous communities should thus be part of the information-gathering effort.

Box 4-2: Legal options for participatory and inter-disciplinary wildlife surveys

- Allow use of multiple sources of information and data, including indices such as population size, status and trends, sex ratios, frequency of sightings, catch effort and trophy quality (i.e. size);
- where available or necessary, encourage use of information and data relevant to a specified hunting block or concession to ensure that science is scaled to the ecology and use;
- encourage the use of standardized information sources, to allow for the comparison of data across areas and years;
- ensure that traditional knowledge is also included among the source of information for wildlife-related decision-making, for instance by requiring or encouraging active collaboration between scientific researchers and people with local and traditional knowledge;
- encourage cooperation between researchers and biodiversity users (private or local communities), in particular, involving indigenous and local communities as research partners and using their expertise to assess management methods and technologies;
- require that population studies be designed not only to look at the current status of species in question, but also undertake studies designed to understand reasons behind observed trends;
- use hunt return forms that provide data on a range of important issues, such as effort vs. success rates, the quality of trophies and off-take rates;
- to avoid at least one form of legislative overreaching, require the use of simple data reporting formats, streamlined to facilitate the collection of data from all stakeholders;

- promote or require investment in wildlife-related research and studies that will promote both consumptive and non-consumptive uses (as part of wildlife-watching activities in national parks and of the management of wildlife reserves);
- provide for the timely and thorough analysis of collected data (i.e. sufficiently in advance of seasons of use, to allow for review and distribution of licenses and permits);
- promote exchange programs in scientific and technical areas.

Source: partly inspired by CBD COP Decision VII/11.

4.2 Requiring management planning as a prerequisite to formal management

As for all natural resources, the management plan is the instrument describing the ingredients for active management – which acts will be undertaken, what responsibilities and what actions will be needed to achieve what ends. The European Charter on Hunting and Biodiversity recommends that management plans and/or measures have clear objectives that take into account the behaviour and ecology (including predation and seasonal effects) and the long-term conservation status of wild species, with provisions to ensure proper implementation, monitoring and updating (chapter 1).

Despite being a primary tool, management plans often go unused. While there are many reasons for this, in the legal world this lack of use can most likely be blamed on two problems: (1) legislative overreaching and (2) a failure to tie the creation and adequacy of the plan to a specific consequence. In other words, the law requires it, but failing to produce one or meet some standard of adequacy has no repercussion.

Another cause leading to failed plans is poor planning procedure, allowing wildlife officials to work in isolation. Without coordination with other officials, the plan may not fit with existing plans for agriculture, road building, tourism, forestry, wetland conservation or other resource use. Without participation of stakeholders, no one outside the government may press for the plan to be followed.

Wildlife management planning may take place at national, project or user levels. This section will focus on national planning exercises, which usually involve setting out policies or programmes for wildlife conservation and use; determining categories of wild species based on their conservation status; or adopting national or regional plans for the use of specific species. National planning exercises may also take place to determine protected area categories, or create such areas, in line with protected areas legislation.

In Lao PDR, legislation **clearly assigns responsibility** for wildlife management planning to the Ministry of Agriculture and Forestry, and specifies the various steps in the planning process: the study and preparation of strategic plans, policies and regulations on wildlife management and use, to be adopted by the Council of Ministers; the adoption of elaborate provisions for implementation of the Council of Ministers regulations; control of implementation; and coordination with local authorities for wildlife protection and use in accordance with state regulations. Bangladesh legislation also assigns institutional responsibility for planning, but is silent on the specific steps for implementation.

The charter also advocated for cooperation with hunters to develop and apply methods for simple and effective monitoring and management of populations, habitats and ecosystem services (chapter 1). This is the case in France, where the departmental or inter-departmental hunters' association develops wildlife management schemes in consultation with representatives of the privately owned rural and forest areas and the Chamber of Agriculture. These schemes should take into account rural areas management plans and relevant forest management plans, as well as regional guidelines on the management and protection of wildlife and its habitats. The schemes include hunting plans, measures for the security of hunters and non-hunters, action to improve hunting practices and to protect and rehabilitate wildlife habitats, and provisions to ensure respect of the "agro-forest-wildlife balance" (Environmental Code, articles L425-1 and L425-2). The plans are revised every three years for big game, and every year for small game. They contain information related to the period of hunting and the number of animals to be hunted to ensure the sustainable development of the game populations and their natural habitats, while considering the interests of agriculture, forestry and wildlife management. National hunting plans apply for species identified through a decree of the *Conseil d'Etat*. In case of disruption or threat to the agro-forest-wildlife balance, the prefect can suspend or limit hunting, so as to

facilitate species repopulation to a level that is compatible with the agro-forest-wildlife balance and in line with the objectives of the hunting plan.

While some countries may disregard the subject of wildlife management planning altogether in their legislation, others have put in place a legal basis for a whole **system** in this respect. In the US, federal agencies of the Department of the Interior, including the Fish and Wildlife Service, are required to prepare fish and wildlife management plans in cooperation with state fish and wildlife agencies and other federal agencies where appropriate (43 CFR 24.4). Where plans are for lands that adjoin private or state lands, the federal agencies must consult with private landowners or states to coordinate management objectives (43 CFR 24.4). The plans must institute fish and wildlife habitat management practices in cooperation with the states to assist the states in accomplishing their fish and wildlife resource plans (43 CFR 24.4). There are also planning requirements for other federal land agencies (such as the US Forest Service) that require consideration of wildlife in their general land management plans.

Another example in this regard is that of Japan, where the "Specified Wildlife Management Planning System" provides for the national government to set up the overall policy on wildlife protection, including designation of protected areas, captive breeding and control of dangerous wildlife and then for prefectures to draw long-term management plans focusing on wildlife populations that are rapidly increasing or decreasing. The plans must state specific goals for the target species and prescribe concrete measures for properly controlled hunting, preventing negative influences and conserving habitat. They should be drawn on population bases, in consideration of local circumstances. Each prefecture can establish comprehensive wildlife protection project plans to actively promote wildlife protection projects, including on wildlife management, control of populations and conservation and management of habitats, as well as specified wildlife management plans at the local level, to control local populations of specific wildlife species (Wildlife Protection and Hunting Law, articles 3–4).

Cameroon's national legislation also provides an articulated system of wildlife management planning requirements. The Wildlife Decree distinguishes between "*plans d'aménagement*", "*plans de gestion*" and "*plans de chasse*". *Plans d'aménagement* must be adopted (by the administration or, in the case of areas managed by private persons, proposed by the same persons and approved by the administration) for protected areas, while *plans de gestion* are prepared by

the administration to set out strategies for the sustainable development of one or more wildlife resources. *Plans de chasse* specify the species and number of animals that may be hunted. Among other matters, they must specify ways to involve local people in management. *Plans d'aménagement* must set out objectives taking into account the interests of neighbouring populations and of biodiversity. *Plans de gestion* must also set out measures intended to involve local people in all management phases and for the equitable sharing of benefits. In addition, "simple" management plans approved by the forestry administration must be in place for every community forest.

Instead of or in addition to general wildlife management plans, certain countries call for the adoption of **species-specific plans**. In these cases, plans may define whether extractive or non-extractive activities are allowed, and set out applicable limitations. In Argentina, for instance, the Ministry of Environment adopts, in coordination with relevant provinces and based on studies and assessments, management plans for CITES-listed species and other species of special concern. The plans may call for maximum extraction quotas and other measures (Aguilar and Morgera, 2009). Switzerland puts action plans in place at the national level for the conservation of certain bird species and their habitats. An action plan includes all the measures, objectives, strategies, role of stakeholders, etc. The 2008 Grand Tetras Action Plan⁸⁷ on bird conservation in Switzerland, for instance, identifies the causes of species depletion and provides for forestry measures to improve the habitat quality as well as measures against species disturbance. In addition, a hunting plan is prepared for areas under partial protection, indicating the number of species that can be hunted and permitted hunting methods. Similarly, in the US, there are also provisions requiring the government to create recovery plans for endangered species (16 USC 1533(f)). This type of planning is tightly linked with legal provisions on species-based conservation, which are discussed in more detail in Chapter 5.

Overall, comparative analysis shows that legal frameworks for wildlife management planning generally remain fragmentary. Legislation provides a more effective basis for sustainable wildlife management when it clearly sets out the obligations and basic steps for planning, including opportunities for public participation.

⁸⁷ See www.bafu.admin.ch.

Another common shortcoming is that legal provisions on management planning often fail to require consideration of impacts of wildlife use on the ecosystem generally.⁸⁸ Thus, planners may disregard so-called "cascade effects" – i.e., the consequences of management on other species or ecosystem services. Management may increase or decrease other species' food or shelter, alter vegetation composition, change carbon storage or water quality, or affect other critical factors. Some of the effects might include predators switching prey, due to declining prey base; or to a situation in which smaller predator population increases due to a decline or loss of large predators, which in turn can lead to declines in small prey species.

In addition, the law should clearly spell out the legal consequences of management planning. For example, the law can require the government to implement adopted plans (or to avoid actions inconsistent with the plans), with a suitable "escape valve" to allow actions in an emergency. If the government grants wildlife concessions or delegates authority to local managers, the law can require those persons to honour the plans or risk revocation of their authority.

Box 4-3: Legal options for wildlife management planning

- Clearly assign the responsibility for wildlife management planning (where possible, on a species-by-species basis, with separate sections on identifiable populations);
- tailor the complexity of planning to the capacities of the agencies and communities involved. Management planning should be a practical tool – one that can be created in simple form and built upon over time. Appropriately designed legislation can assist in establishing an achievable requirement;
- state specifically what information must be included for the plan to be adequate. This may include at a minimum:
 - a legal description of the area covered (whether national, provincial, local, or some other designation). A "legal" description may include or officially recognize customary land boundaries and/or natural boundaries (e.g., rivers, river basins, mountain ranges, etc.);

⁸⁸ Adapted from Addis Ababa Principles and Guidelines.

- the species living in the area and particularly those to be covered by the plan (if the plan is to focus on specific species);
- the period for which the plan is valid;
- a description of habitat types, amounts, and plant composition (where possible);
- a description of history of land use, habitat manipulation and wildlife management;
- data on historical wildlife harvests where such information is available;
- a brief statement of the wildlife management goals and objectives;
- approved survey methods to be used for determining population density, with deadlines for submitting the current year's survey data;
- an approved method for determining harvest levels, or for adjusting them, when necessary, if these are already determined in the plan; and
- recommendations for habitat conservation for the species;
- spell out all the steps leading to the adoption of the plan in a logical sequence including opportunities for public participation;
- require updating this plan at regular intervals, as well as when new scientific information so requires;
- clarify the legal implications of management plans: who should comply with them, which legal tools should be in line with management plans (such as allocation of quotas and conditions for permits and concessions), under what emergencies the plans can be ignored and what procedure to follow in those cases;
- condition the establishment of quotas for any area or species to the prior approval of a management plan;
- specifically grant the court or other authority the power to stay any agency action for a given area where it is alleged and shown that there is no management plan or that the plan does not meet adequacy requirements, or when the action is inconsistent with an applicable plan;
- require consideration of impacts of wildlife use on ecosystems;
- link responsibility and accountability to the spatial and temporal scale of use, and design monitoring systems of a temporal scale sufficient to ensure that information about the status of wildlife and its ecosystem is available to inform management (for hunting seasons, for example, this implies legally mandating that monitoring results and quota setting be accomplished sufficiently in advance of the season to allow for review, amendments as necessary, and distribution licenses or permits);

- set monitoring guidelines that require managing bodies to consider aggregate and cumulative impacts of activities on a target species and well as related species or ecosystem;
- aim at avoiding or minimizing adverse impacts on wildlife and its ecosystems, by requiring – when the use of additional resources is justified by necessity – the formulation and implementation of contingency action plans and, where previous impacts have degraded and reduced biodiversity, remedial action plans.

Source: partly inspired by Addis Ababa Principles and Guidelines, practical principle 5.

4.2.1 Coordination among multiple planning exercises

Both the procedure and the substance of planning should mesh with other planning requirements. For example, procedurally, if wildlife planning requires an EIA under the EIA laws, then wildlife planning steps and deadlines should fit with the procedures for EIA. Substantively, if there are parallel land use, agriculture, forestry, water use or other plans that affect wildlife, the law should require consultation among the planners, to assure consistency. If the country has both general wildlife plans and specific plans for particular protected areas or species, the law should require the government to coordinate these efforts to assure consistency.

Several countries present a more developed planning process for **protected areas**, requiring site-specific management plans. In Mali, the law requires management plans for national parks, wildlife reserves sanctuaries, hunting areas and leased areas (Wildlife Law, article 55). In Belize, pursuant to the National Parks Act, upon declaration of a wildlife sanctuary, the Chief Forest Officer must provide a management plan for the area subject to approval of Minister of Natural Resources. In Chile's case, the Protected Areas Law establishes that CONAF must elaborate a management plan for each protected area establishing its management category (article 13).

These types of provisions can be more or less participatory, thus implying some coordination with other planning. In Uganda, the law requires a "comprehensive" management plan for every wildlife protected area. For this purpose, before the drafting of the plan, the director must publish a notice requesting suggestions, solicit proposals from district councils, organize and

attend public meetings to provide explanations and consider comments. The plan is subsequently drafted and further reviewed (Wildlife Act, section 14). In Gabon, every national park must have a management plan, formulated by the park's administration after consultation with all concerned parties, including communities living within the park and in neighbouring areas. The plan must take these communities' customary usage rights into account (National Parks Law, article 21). In Mauritius, the Director of the National Parks and Conservation Service must prepare management plans for reserved land that also address wildlife conservation. The director must publish the management plans in two local newspapers, and for sixty days any person can submit written comments that the director will have to consider prior to finalizing the plan (Wildlife and National Parks Act, article 13).

Sometimes, forest legislation may provide the framework for integrating wildlife management in area-based planning exercises. **Forest management planning** requirements may focus particularly on wildlife in game reserves or areas similarly set aside for wildlife management purposes (as in Malawi, Cameroon and Namibia). In Guyana, one of the objectives of the forest management plan is to protect the forest's wildlife and biodiversity in general. In the Democratic Republic of Congo, management plans for forestry concessions must also envisage measures for the protection of wildlife (Decree No. 08-09, article 27). In these cases, therefore, there may be no need for a separate, wildlife-specific management plan.

The law should harmonize the requirements for adoption and content of management plans. Ideally, management of natural resources would be comprehensive, addressing interrelated resources and land uses under a single process. However, the law inevitably divides authority over resources, between private and public land owners, between national and local authorities, between cabinet ministries, and between nations. Because multiple minds are at work, the law must provide for coordination. Where the law creates parallel planning processes for related subjects, it should ensure that the resulting plans are complementary. Where there are hierarchies of plans (tiered planning), the specific or short-term plans should respect the general or long-term plans. And to promote coordination, the law should require wildlife planners to systematically consult with all concerned authorities, at the central and local level, in addition to the concerned public.

A few examples of legal provisions **mandating coordination** among various management planning exercises related indirectly or directly to wildlife exist. In Namibia, the forest law expressly requires hunting in classified forests to comply with the forest management plans (Forest Act). In China, general plans for environmental protection and development planning of nature reserves formulated by the state must be incorporated into national economic and social development plans (Environmental Protection Law, article 4; 1994 Regulations on nature reserves, article 4).

In drafting the law, existing planning requirements of related laws and the responsibilities of pre-existing institutions will thus have to be considered. As a result, aspirations of single authorities may be curbed, limiting their role to the specified aspects of an overall environmental and land use management planning scheme.

In France, the concept of "**agro-forest-wildlife balance**" seeks to ensure compatibility of long-term presence of various forms of wildlife with the durability and profitability of agricultural and forestry activities (Environmental Code, article L425-3, 4, 6 and 10). The departmental wildlife management schemes are binding upon individual hunters and hunters' associations.

Box 4-4: Legal options for coordinated planning

When multiple requirements for management planning exist, facilitate coordination by:

- requiring systematic consultation of concerned authorities;
- making some plans subject to others;
- requiring consideration or integration of related (forest, protected areas, rural areas) planning into wildlife management planning;
- limiting some planning processes to providing a component of wider planning exercises.

4.2.2 Public participation in management planning

The reasons for public participation in planning are much the same as the reasons for public participation in drafting, discussed in Chapter 2 above. By

genuinely involving concerned people, planners tap into local knowledge, become better equipped to account for traditional practices and give people a greater sense of equity in the management of the resource. This constitutes a precondition for empowering the poor.

To a limited extent, planners can gain knowledge about local practices through **secondary sources**. In Uganda, for instance, the legislation provides for a study of historical or cultural interests of any individual or class of persons resident in a wildlife conservation area (Wildlife Act, section 26). However, primary sources are more reliable, and assumptions about what people know or want cannot substitute for direct contact with the affected people.

Other provisions require that the plans **address the needs** of rural populations (as in Madagascar, Tanzania Mainland and Zanzibar) or set out areas for community participation (as in Botswana), or allow agreements with local communities for the plans' implementation (as in Malawi). These types of provisions seem to result in communities being addressed in the plan rather than being involved as actors in the process of planning. Therefore, if these provisions are not accompanied by provisions promoting involvement of stakeholders from the early stages of shaping management objectives and measures before the plans become definitive, they are not likely to result in effective plans.

Stakeholders may include people with diverse and perhaps opposing interests. Interaction often brings to the forefront tensions among local communities, wildlife traders, recreational hunting associations, farmers, indigenous peoples, NGOs, international donors and state authorities from the municipal to the highest government levels. Consensus may be unlikely. However, the chances of finding broadly acceptable outcomes increase if the law allows the parties to participate early in the process, before governments or people have committed their own resources to a particular course of action. Participation at the planning stage can therefore be particularly appropriate, resulting in less resistance when implemented and better enforcement and control during implementation.

It should be noted from the outset that having public participation schemes in place in itself, however, does not guarantee an outcome that will benefit the most vulnerable. The poor generally have more difficulty in accessing bureaucracies and markets, and may thus be underrepresented in public

participation exercises. To some extent the law can counter this, for example, by requiring notice to affected communities, distribution of summaries of plans written in the local language, and so forth.

Requirements for **public participation** in management planning are fairly common but not all are equally appropriate. In the case of South Africa, management planning is left to the initiative of individuals, organizations or organs of the state, who may submit a draft plan to the competent national authority. Specifically, any person, organization or organ of state may submit to the minister a draft management plan for: (a) an ecosystem, (b) an indigenous species that warrants special conservation attention or (c) a migratory species protected in a binding international agreement. The minister must identify a suitable person or entity which is willing to be responsible for the implementation of the plan and enter into an agreement with such a person or entity, publishing the approved "biodiversity management plan" in the Gazette (National Environmental Management Biodiversity Act, section 43). While bottom-up and participatory, this system relies on ad hoc, voluntary approach that may not necessarily cover all issues that should be covered by management planning.

Federal law in Argentina requires officials to work towards consensus among range provinces and stakeholders for species-specific plans to be adopted at the national level. Such consensus-building exercises usually take the form of workshops where stakeholders assess and try to achieve consensus on the status and proposed regulations to ensure sustainable management of specific species. Argentina, thus, has organized workshops for the development of management plans for specific species of national concern (such as South American camelids guanacos and vicuñas, Andean deer, foxes and parrots), discussing management requirements and maximum extraction quotas with interested members of the public (Aguilar and Morgera, 2009).

It is interesting to note that if the law requires consensus, it ends up placing terrific power in the hands of every player. Any player can hold the process hostage, for a good reason or for no reason at all. On the other hand, a law that requires the government to seek consensus, to the greatest practical extent, is laudable. Legal drafters should try and identify the most appropriate solution to this dilemma in the local circumstances.

Sometimes, participation is most often formalized in protected area management planning legislation. For example, Brazil issued a regulation for

the design of participatory management plans in 2007, defining which categories of extractive reserves and sustainable development reserves require a management plan to be developed in consultation with local populations. In these cases, each protected area has a deliberative body with representatives of public institutions, civil society and traditional populations (residents in the area and users). Inhabitants of the reserve receive special consideration in decisions regarding management plans, infrastructure that may impact on the unit and conflict resolution.

New Zealand **differentiates between wildlife planning for conservation purposes and for recreational use**, but provides a public approach for both. Thus, statements of general policy are drafted by the Director-General of Conservation after consultation with the New Zealand Fish and Game Council in the case of sports fish and game policy, or the Conservation Authority in any other case. The statements are made available for public inspection and submission of comments by interested persons and organizations and regional councils, before their approval by the minister. Then, on the one hand, conservation management strategies are developed by the Director-General of Conservation to implement general policies and establish objectives for the integrated management of natural and historic resources, including any species, under several acts, and for recreation, tourism or conservation purposes, as well as conservation management plans to implement these strategies and establish detailed objectives for integrated management within a specific area. Consultation with the conservation boards of the area concerned, and other persons and organizations considered appropriate, are carried out. Draft strategies and plans are notified to appropriate regional councils and territorial and Maori authorities; and are made available for public inspection and submission of comments. Public hearings must also be organized. On the other hand, sports fish and game management plans aim to establish objectives for such management within any region or part of region. The Fish and Game Councils prepare them for approval by the relevant minister, in accordance with relevant acts, policies, and conservation management strategies and plans, having regard to the sustainability of sports game in the area, and to the impact that the proposed management is likely to have on other natural resources and other users of the habitat concerned. Plans must include such provisions as may be necessary to maximize recreational opportunities for hunters and anglers. A public consultation process applies as set out in detail.

In the Philippines, detailed rules provide that a general management planning strategy is to serve as a guide in formulating individual plans for each protected area. The management planning strategy must also provide guidelines for the protection of indigenous cultural communities, other tenured migrant communities and sites, and for close coordination between and among local agencies and the private sector. The strategy is also to ensure that management decisions are made with interdisciplinary inputs and participation of all stakeholders (Implementing Rules and Regulations to the National Integrated Protected Areas System Act, rule 10.1). The rules establish a process to allow methods such as stakeholder analysis, participatory resource assessment and community mapping to generate community inputs into the management plan and promote ownership of the plan by the local communities. The management plan is to be presented to the stakeholders through public consultations, and issues and concerns raised must be addressed. As long as these processes fully take into account wildlife-related concerns, they can fill gaps in management planning in wildlife legislation.

Other legal options include requiring the opinion or approval of multi-stakeholder bodies within management planning processes (see detailed discussion in chapter 2). For example, Bolivia requires the support of its Wildlife Advisory Council prior to the enactment of ministerial resolutions approving management plans by national authorities (Bolivia Decree on sustainable wildlife management plans, 1999, articles 1–5).

In some instances, the law requires management plans to explain how the public will participate in the actual management of wildlife and to include specific provisions on **benefit-sharing**. In Liberia, a national park management plan should include "plans for local involvement and public participation" (Wildlife and National Parks Act, article 17). The relevant authority must consult with and take into account the views of local residents in the administration and management of protected areas, creating a local advisory committee to assist in this purpose. In Congo, local communities must be involved in the preparation and implementation of protected areas management plans and must benefit from revenues generated by activities carried out in protected areas. Minimum contents of plans include specific ways to involve the local population in management (Wildlife Law, articles 19–22).

In conclusion, sound management planning is essential for sustainable development; public participation is indispensable for improving planning,

promoting implementation and empowering the poor, and legislation can deploy various tools to this end.

Box 4-5: Legal options for participatory management planning

- Require public participation before the adoption of the management plan, by providing adequate early opportunity for the public to appraise draft plans and creating an obligation for authorities to consider comments and inputs from the public or at least justify their non-consideration of such comments;
- ensure that traditional users from local and indigenous communities can participate in wildlife management planning that may affect their customary practices requiring that women and vulnerable groups within relevant communities have an opportunity to participate too;
- include in wildlife management plans measures for public participation in actual management and possibly also for benefit-sharing.

4.3 Sharing management planning responsibilities between central and local authorities and with local communities

According to the ecosystem approach, management should be decentralized to the lowest appropriate level, because "the closer management is to the ecosystem, the greater the responsibility, ownership, accountability, participation and use of local knowledge."⁸⁹ The key term is "appropriate", which involves issues like capacity. It also involves thinking about the bounds of the ecosystem, which for some migratory species are quite large and may not coincide with political bounds. Also, the concept focuses on "management", not policymaking, which implies the need to respect higher level policies as embodied in law.

Applied to hunting and wildlife conservation, this principle would recognize that where a trophy animal occurs only in a given area, then the communities that live in and government agencies responsible for that region should be responsible for the management of that particular wildlife population (subject, of course, to any governing legislation at the national or sub-national level). The ecology of the resource often involves a specific area, and the economy of use is often local. This principle, therefore, on one side,

⁸⁹ CBD Decision VII/11, Annex, principle 2.

advocates for the decentralization and/or the delegation of some management responsibilities to local government entities. On the other hand, the principle recognizes that management of natural resources is strongest when both local communities and responsible government agencies are involved. While local communities are often in the best position to affect local management, they often lack fundamental capacities that can be improved with the help of responsible government agencies and through appropriately selected policies and actions. Government agencies acting alone have a strong tendency to manage the resource for interests that ignore the realities of local needs and uses. Such marginalized communities become competing users of the resource and declines in species populations are most often the result. Legal tools can address these challenges.

In Australia, competence for wildlife management planning is **shared between the federal and state and territory governments**. The Natural Resource Management Ministerial Council develops national approaches to natural resource management and ensures inter-governmental coordination. The relevant minister may, on behalf of the commonwealth, cooperate with, and give financial and other assistance to, any person for the purpose of identifying and monitoring biodiversity components. This is particularly significant as one obstacle to effective decentralized planning is lack of resources at the local level. The minister may prepare a bioregional plan for a bioregion that is within a commonwealth area, following public consultation on the draft in accordance with the regulations. In the plan's preparation, the minister may cooperate with a state or territory agency for a bioregion that is not wholly within a commonwealth area. A bioregional plan may include provisions about: the components of biodiversity, their distribution and conservation status; important economic and social values; mechanisms for community involvement in implementing the plan; and measures for monitoring and reviewing the plan (Environment Protection and Biodiversity Conservation Act, sections 171–172). This is important to overcome shortcomings of local planning for issues that go beyond the geographic limitations of territorial units. The minister may make and implement a wildlife conservation plan for the purposes of the protection, conservation and management of a listed migratory species or a conservation dependent species, adopt the plan made by a state or a self-governing territory, or adopt joint wildlife conservation plans with states and territories. Public consultation and taking the advice of the scientific committee are also provided for. The plan must provide for the research and management actions necessary to support survival of the species concerned, seek to

minimize any significant adverse social and economic impacts, and have regard to the role and interests of indigenous peoples (Environment Protection and Biodiversity Conservation Act, sections 289–290).

Laws may require **site-specific management plans** from operators of hunting ranches and captive breeding operations (Argentina, Brazil, Costa Rica, Ecuador, Guatemala and Mexico), and from managers of protected areas to develop a sustainable wildlife management plan before conducting certain activities. In Peru, the use of wildlife in communal lands for commercial or industrial purposes by indigenous and rural communities requires the approval of a management plan. These communities may request the assistance of authorities for the design of the plan (Wildlife and Forestry Law, article 15).

In Burkina Faso, the holders of concessions to utilize wildlife in partial wildlife reserves, local refuges and ranches are to develop wildlife management plans to be approved by the local wildlife administration (Forest Code, articles 153–157). Village hunting areas must have a "management plan" approved by the regional wildlife administration. "Hunting plans" within each area are also to be established by the central wildlife administration, upon proposal of the regional administration. In Viet nam, forest owners must develop management plans for protected animals in their area and issue internal protection rules (Decree No. 32/2006/ND-CP, article 12). In the Philippines, when community-based programmes are in place in protected areas, the people's organization prepares the management plan or an ancestral domain sustainable development and protection plan.

In Mexico registration of wildlife management units (so-called UMAs) requires a management plan designed by a registered technician. Management plans must include specific objectives and indicators for success, methods for collecting information, a calendar of activities, and measures to manage habitat, population and specimens, as well as control and contingency measures. Specific population studies are not required, and technicians may present management plans based on different approaches and methods (Wildlife Law, articles 39–41). This has allowed the development of Mexico's Borrego Cimarron project, which is based on the issuance of a handful of hunting permits to benefit conservation research and sustain the livelihood of a local community through the registration of their land as an UMA and the issuance of permits for recreational hunting of *borrego cimarron*

(bighorn sheep) that are then sold by communities to foreigners every year (Aguilar and Morgera, 2009).

Similarly, regulatory regimes may request species-specific management plans directly from users. In Guatemala the commercial use of species in categories II-III of its List of Endangered Species is subject to the approval by authorities of management plans developed by users, to guarantee sustainable use. In addition, plans are also sometimes requested for community-based wildlife management. In Bolivia, communities devise plans for the management of vicuñas or reptiles, usually funded and aided by either NGOs or universities, and present the plans to the national authorities. Plans are then evaluated, and if adopted, authorities issue a biannual quota to a community to use particular wildlife species in a particular area. Brazil requires a wildlife management plan for captive breeding operations leading to exporting CITES-listed species (Aguilar and Morgera, 2009).

In the US, habitat conservation plans are required for those seeking permits to provide protection from violating the Endangered Species Act. **Private landowners, corporations, state or local agencies or Native American tribes** who are planning on conducting activities that may incidentally harm (which is defined as a prohibited "taking" under the act) endangered or threatened wildlife are required to obtain an incidental take permit from the Fish and Wildlife Service. The Habitat Conservation Plan (HCP) is then to be designed to offset any harmful effects the proposed activity might have on the species⁹⁰. These plans have become more commonplace, as they permit private landowners to conduct development projects on non-federal lands that otherwise would have been prohibited if the project was likely to cause the taking of an endangered or threatened species (Hulick 2006). This is thus arguably a way to get local people (private land developers, often) to propose and follow management plans. The government retains, however, a significant degree of power: it can deny a HCP if the plan seems insufficiently justified or inadequate; or it can insist on any additions to the proposed HCP that seem scientifically justified.

If appropriately designed, legal frameworks allowing the sharing of management planning responsibilities may contribute to create partnerships between the authority and users, make local government and users more

⁹⁰ See www.fws.gov.

accountable, and take into account more effectively local concerns, thus contributing to empowering the poor.

Box 4-6: Legal options for sharing wildlife management responsibility

- Where wildlife management decisions concern a specific area, entrust qualified local government with (part of) management responsibilities;
- where wildlife occurs in several areas or migrates between political borders within the country, involve regional and local authorities in the coordination of management;
- allow local authorities to legislate on certain aspects of wildlife management (regulation of local initiatives), within limits set by national legislation;
- empower protected areas management entities to determine applicable rules within their areas, within limits set by national legislation;
- create the possibility for the central government to conclude "agreements" with local governments to specify which wildlife management responsibilities can be exercised at the local level;
- in all the above-listed cases, ensure communication and information sharing among the different levels of management;
- create joint decision-making requirements, supported by the provision of all information available both to local communities and government managers;
- allow for sharing wildlife monitoring responsibilities with local communities;
- allow for the delegation of enforcement authority to local communities, within limits set by national legislation;
- establish a negotiated process, where feasible, that allows for: (1) the use of different instruments, including contracts, memoranda of understanding, collaborative management agreements, etc., to formally recognize the kind of sharing that will occur, and (2) the changing of responsibilities as experience dictates without requiring a change in the law;
- provide adequate channels of negotiations and conflict prevention/resolution that is appropriate, understandable and easily accessible by local communities.

Source: partly inspired by Addis Ababa Principles and Guidelines, particularly principle 9, seventh operational guideline

4.4 Providing for international cooperation where multinational decision-making and coordination are needed

Practical principle 8 of the Addis Ababa Principles and Guidelines states that adequate management of a given species will require cooperative efforts (typically embodied in bilateral and multilateral agreements) between states to determine how resources will be used. Past experience shows that the absence of such agreements results in piecemeal management, which fails to prevent the over-utilization of a resource. The Convention on Migratory Species (see chapter 1 above) typically facilitates the conclusion of agreements among states that provide the "range" for migratory species listed in Appendix II of the convention. In the absence of listing at the international level for specific species, or for states that are not parties to the convention, national legislation may provide specific tools to ensure such cooperation.

One example can be identified in the Natural Resource Management Ministerial Council (NRMMC) in Australia for instance, which consists of the Australian/State/Territory and New Zealand government ministers responsible for primary industries, natural resources, environment and water policy. The NRMMC was established in 2001 and subsumed the Agricultural and Resource Management Council of Australia and New Zealand, the Australia/New Zealand Environment and Conservation Council and the Ministerial Council on Forestry, Fisheries and Aquaculture.⁹¹

Another example is provided by wildlife and land management agencies in Canada, the United States, and Mexico working on a coordinated, continent-wide plan for conservation of the monarch butterfly, which migrates seasonally through the three countries. Mexico has created protected areas around the butterflies' wintering areas and wildlife managers from the other two countries are supplying advice and funds to support management. The United States and Canada are working to protect summer habitats for the species in their countries.⁹²

A third example can also be found in the US, where under the Migratory Bird Treaty Act, to determine annual open seasons and quotas, which typically vary by state or region, the secretary consults with wildlife scientists

⁹¹ See www.mincos.gov.au.

⁹² See www.fs.fed.us.

and "flyway councils", made up of wildlife officials along the principal migratory routes in the US and Canada. The federal laws governing adoption of subsidiary legislation require the government to publish the rules in draft and take public comment before publishing the final rules.

Box 4-7: National legal options for international cooperation

- In the absence of international listing of migratory species, require the managing authority to identify wildlife populations that migrate into neighboring countries and engage in cooperation with those countries (This may take the form of requiring the responsible agency to identify existing multilateral treaties to which they may become a party);
- grant the power to the managing authority to propose and develop bilateral or multilateral agreements between or among the states or relevant state authorities for the sustainable use of transboundary wildlife resources;
- for transboundary wildlife populations, make it the responsibility of the appropriate agency or agencies to establish formal and informal links with those countries to undertake joint management of the resource where necessary;
- legally require that funding be made available to promote multinational technical committees to prepare recommendations for the sustainable use of transboundary wildlife resources.

5. CONSERVATION

As highlighted by the Addis Ababa Principles and Guidelines, society cannot achieve sustainable use without effective conservation measures.⁹³ Conservation is indeed the "priority target" of the ecosystem approach.⁹⁴ Several legal tools can support wildlife conservation. The law can frame general principles that should guide public authorities, as well as individuals and communities. The law can also use more specific techniques, namely species-based conservation, area-based conservation, as well as the

⁹³ Addis Ababa Principles and Guidelines, preambular para. 2.

⁹⁴ CBD Decision VII/11, Annex, principle 5.

protection of wildlife from harmful processes (indirect threats). Sustainable use in turn contributes to conservation, creating incentives for stakeholder active involvement and contributing to poverty reduction and sustainable development (see chapter 5 below).⁹⁵ Wildlife management planning must take all these aspects into consideration (chapter 3), to ensure that managers account for interactions among species and their habitats and regularly review and update management approaches.

A common weakness of the law is the lack of a clear framework for management planning, already pointed out in Chapter 3, which makes it difficult to achieve sustainability. Another weakness is the tendency to concentrate conservation efforts on more attractive species rather than all wild animals, and on protected areas rather than whole countries. Also, loosely defined exceptions to conservation regimes can contain loopholes. In the case of Zimbabwe, for instance, "guests of the state" may be authorized to hunt in conservation areas (Parks and Wildlife Act, section 39), without any further criterion to ensure that environmental considerations are fully taken into account. These are some of the key challenges addressed in this chapter.

Legislation may enshrine **general principles** on conservation. Although general statements of policy in statutes are not directly enforceable, they can serve at least three purposes. First, they give the implementing agency general direction. Second, courts have been known to look to them as signs of the legislators' intent when seeking how to interpret ambiguous passages elsewhere in the law. And third, the statute itself can refer back to them when setting limits on agency discretion. For example, the statute could require that rules, management plans, or grants of permits be consistent with the stated policies. Kazakhstan's Law on Wildlife, for instance, sets "basic requirements for wildlife protection", which include biodiversity conservation; preservation of habitats, migration routes, "places of concentration of animals" and conditions for reproduction; "scientifically motivated and rational use and reproduction of fauna", "regulation of the quantity for preservation of the biological balance in nature" and fauna reproduction, including artificial animal breeding (Law on Wildlife, articles 12–13).

⁹⁵ World Summit on Sustainable Development, Plan of Implementation (2002), para. 44(d). See also IUCN Policy Statement on Sustainable Use (Resolution 2.29, 2000), para 7a): "Use of living wild resources, if sustainable, is an important conservation tool because the social and economic benefits derived from such use provide incentives for people to conserve them."

This chapter will identify trends and legal options related to a species-based and area-based approach to wildlife conservation, highlighting avenues for public participation; legal tools for stakeholder involvement in wildlife conservation efforts; legal means to protect wildlife from harmful processes and negative impacts (focusing on the environmental impact assessment); and legal issues related to wild animal health and human-wildlife conflicts.

5.1 Using a species-based approach in a participatory way

Species-based approaches have long been accepted as an appropriate method for wildlife conservation. They focus attention on the conservation status of the species regardless of where it occurs and allow for management on the broadest possible scale. As a matter of course, they lead to inter-agency and cross-border initiatives.

Some countries have passed laws protecting a **single species**, or a group of linked species, because of high cultural importance, high ecological importance or international obligation. For example, the US has specific laws on the protection of eagles, a national symbol (16 USC 668–668d), and on protection of migratory birds, enacted to implement bilateral treaties (16 USC 703–712). In Chapter 1, it was highlighted that the EU adopted a specific directive on migratory birds to harmonize legislation of member states with a view to improving migratory birds conservation.

Many countries have laws protecting **lists** of endangered species. Ordinarily, wildlife statutes should avoid setting out a list of protected species. High-level declaration of which species are protected will basically deprive the management planning process of significance and impede flexibility in the face of new scientific knowledge or changed international obligations. Nonetheless, countries such as Burkina Faso, Central African Republic, Congo, Mauritius and Sudan, include lists in principal legislation. Others, as the Democratic Republic of Congo, Ghana and Liberia, also include lists in the principal legislation, but allow revisions by subsidiary legislation. In others countries, such as Gabon, the principal legislation requires the adoption of lists by subsidiary legislation. In Chile, a list of wildlife species, with information on the status of their conservation, as well as a list of species that may be hunted with applicable quotas, was established by the Regulation to the Hunting Law in 1998 (the list was further modified in 2004).

Ideally, the law should rather establish the responsibility, criteria and processes for listing protected species, as well as the legal consequences of such listing. The first set of questions legal drafters should address in this respect is as follows: what is the **process** to determine which species are covered? Is there a role for public participation in that? Can you incorporate other lists by reference, and does that raise any legal issues? If the listing process takes time, is there any way to give the species interim or emergency protection?

In Central Asia and the Caucasus, legislation commonly requires the drawing of a Red Book of protected species, although the listing process is seldom regulated in detail. In Armenia, legislation requires that the preparation of the Red Book comply with international agreements and be based on science (Law on Fauna, article 14), but the procedures for the management of the book are complicated and unclear. In Japan, the Ministry of the Environment publishes the Red List of threatened wildlife, which categorizes endangered species into nationally endangered, internationally endangered, and temporarily designated endangered species, all of them to be designated by a Cabinet Order (Law for the Conservation of Endangered Species of Wild Fauna and Flora, article 3). The prime minister must draft a national guideline for endangered species conservation, following consultation with the Nature Conservation Council (article 6).

In the UK, the Secretary of State for Environment, Food and Rural Affairs draws up a list including all habitats and species of principal importance for England's conservation of biodiversity (Natural Environment and Rural Communities Act 2006, section 41). In Australia (Environmental Protection and Biodiversity Conservation Act), the central government and state and territory governments maintain lists of threatened species. Species Information Partnerships aim to achieve consistency between these lists, and to increase exchange of information in the listing and recovery of threatened species among different levels of government. In addition, the law spells out the **steps in the process** of listing in a logical sequence: the minister may determine conservation themes and invite people to nominate items for inclusion and forwards the nominations to the Scientific Committee. The latter drafts a list of items to be assessed and invites comments on the list, which is then revised and forwarded to the minister for final approval. The process involves an annual cycle known as an assessment period. In specific circumstances, the Scientific Committee may coordinate its assessment with the Australian Heritage Council.

In addition or in the alternative, legislation may spell out the **criteria** according for categorisation and listing of species. In Jordan, the Agriculture Law, 2002 identifies five national criteria for listing wildlife species into the three schedules: international status (IUCN, CITES), national conservation status, ecological importance, local distribution importance, and threats influencing the species. According to the Philippines Wildlife Act, classification as critically endangered, endangered or vulnerable is based on the best scientific data with due regard to internationally accepted criteria, including present or threatened destruction, modification or curtailment of habitat or range; over-utilization for commercial, recreational, scientific or educational purposes; inadequacy of existing regulatory mechanisms; and other natural or man-made factors affecting the existence of wildlife. The government is to update the list of categorized threatened wildlife regularly, but a species listed as threatened must remain on the list for at least three years following its initial listing.

In Switzerland, the law establishes a system of **priority protected species**, to take into account the limited resources that can be used for species conservation. The law gives priority to species that are most sensitive, which are included in a Red List as an indication that urgent action is needed. The criteria for identifying these species include the degree of danger, their rarity, their international importance and the adequacy of current protective instruments, such as the designation of protected areas and the measures applying within them. In order to adopt the correct conservation measures for each species or group of species, research is conducted to identify threats and other factors affecting species conservation.⁹⁶

The determination of species and of the degree to which they should be protected may have a significant impact on species conservation, but also on people's livelihoods, determining consequences on availability of bushmeat, as well as in terms of human-wildlife conflicts (see section 7.4 below). Therefore, the law or the government must seek a balance among environmental, economic and social interests, by considering various stakeholders' positions. However, many laws fail to require **participatory procedures** for the determination of protected species. One limited example can be found in the legislation of Mali, where the minister may list protected and game species in addition to those set out in annex to the law, upon request of local authorities (Wildlife Law, article 54). Such input from the

⁹⁶ See www.vogelwarte.ch.

local level is however only an option that may allow consideration of local concerns, and does not necessarily have to be requested.

Another legal option is to allow stakeholders to take the initiative in proposing listings. In the Philippines, any person can seek the addition or deletion of a species from the list upon filing a petition based on substantial scientific information. The government evaluates the petition in accordance with criteria set by legislation and the status of the species concerned. The relevant authority must act within a "reasonable period of time" (Wildlife Act, section 22). An administrative order specifically provided for consultation with scientific authorities, academia and other stakeholders, in the review and updating of the list (2004 DENR Administrative Order 15). Along similar lines, in Viet nam, the legislation distils a list of organizations or individuals who may submit proposals for inclusion or exclusion of a species (including those conducting surveys or research on species in the country; those assigned to manage forests, conservation zones, wetlands and other natural ecosystems; and societies, association and other organizations involved in science and technology or the environment). The Ministry of Natural Resources and Environment should draw the updated list and submit it to the government for decision. The list of endangered, precious and rare species is publicized through the media (Biodiversity Law, articles 38–41).

In Zimbabwe, the Parks and Wildlife Act requires a consultative procedure for the declaration of protected animals and for the adoption of rules limiting hunting and allowing reduction of problem animals on alienated land. A proposed notice setting out such rules must be notified to "the appropriate authority for the land concerned" and a reasonable opportunity of making representations must be given before adoption. Copies of the notice must be published in three consecutive issues of a newspaper circulating in the area (section 77).

In the US, under the Endangered Species Act, listing is by subsidiary legislation, which entails publishing a draft rule and taking public comment (16 USC 1533). The two listing agencies (one under the Secretary of Commerce for marine species and one under the Secretary of the Interior for all other species) can initiate listing on their own, but they must also consider stakeholder petitions to add or remove species, and must make an initial determination within 90 days, if practical, of whether substantial scientific or commercial data justify further action on the species named in petitions.

In Angola, according to the draft wildlife law, the government should list protected species (endangered, rare and threatened) on the basis of the best available scientific information, and subject to the approval of local communities, taking into account historic records of population levels and existing risks. The government should update lists of protected species regularly, at least every ten years and with the same frequency as forest management plans. The process should allow the participation of interested stakeholders and environmental organizations.

The second order of questions for drafters concerns the following: are there multiple **categories of species**, and if so, what are the common distinctions between the categories, in terms of qualifications and consequences of listing? In South Africa, for instance, under the National Environmental Management Biodiversity Act, the minister may publish lists of:

- critically endangered species (indigenous species facing an extremely high risk of extinction in the wild in the immediate future);
- endangered species (indigenous species facing a high risk of extinction in the wild in the near future, although not critically endangered);
- vulnerable species (indigenous species facing an extremely high risk of extinction in the wild in the medium-term future, although not a critically endangered species or an endangered species); and
- protected species (which are of such high conservation value or national importance that they require national protection, although not listed above) (section 56).

In China, "special state protection" is accorded to species that are "rare or near extinction"; "state protection" is accorded to species that are beneficial or of important economic or scientific value; and "special local protection" is accorded to wildlife especially protected by provincial-level governments. Each category has different legal consequences related to hunting, catching or killing of wildlife; scientific research, domestication and breeding, exhibition or other special purposes; trade; and human-wildlife conflicts (Wildlife Protection Law, article 9).

New Zealand sets out the protection levels for different wildlife species in a series of schedules under the Wildlife Act listing animals and birds falling into each category:

- Absolutely protected wildlife throughout New Zealand, which is the wildlife not included in any schedules and all wildlife in sanctuaries (sections 8 and 10);
- wildlife declared to be game, which can be hunted within specified seasons and according to the regulations (Schedule 1);
- partially protected wildlife (section 5 and Schedule 2);
- wildlife which can be hunted from time to time at the discretion of the minister (section 6 and Schedule 3);
- wildlife not protected; however the minister has the discretion to declare wildlife in this category must not be hunted (section 7). Currently there is no such wildlife listed and Schedule 4 is repealed;
- noxious animals, which are subject to the provisions of the Wild Animal Control Act (section 7A and Schedule 6);
- terrestrial and freshwater invertebrates declared to be "animals" (under the act, the term has a definition more restrictive than the dictionary sense) and therefore subject to the provisions of the Wildlife Act (section 7B and Schedule 7); and
- certain unprotected animals that "no person can farm, breed, or sell, or capture or convey or keep in captivity for the purposes of farming, breeding, or selling" without the permission of the minister (section 7C and Schedule 8).

In Lao PDR, the Forestry Department's director general specifies the endangered wildlife species protected by the law, dividing them in three categories: completely protected animals, protected animals and seasonally protected animals (Forest Department Notification No 583/94). "Rare wildlife, nearly extinct or having special value", outside preserved forest lands, should be protected in the same way as inside protected areas, according to specific regulations issued by forestry management agencies in collaboration with the local authorities (Forestry Law, article 43). Viet nam divides wild animals into "group I", consisting of those *strictly* banned from exploitation and use for commercial purposes, and "group II", consisting of those restricted from exploitation or use for commercial purposes, including forest animals of scientific or environmental value or high economic value, with small populations in nature or in danger of extinction (Decree No. 32/2006/ND-CP, article 2). In Guatemala, national legislation requires users of commercial species in categories II–III of its List of Endangered Species to prepare management plans to guarantee sustainable use and secure plan approval from the authorities (Decree No. 4-89, article 24).

While there may be significant variations in ways of categorizing protected species that should be justified by local circumstances, legislators should ensure respect for international species listing when their country is party to a relevant international agreement. In addition, legal drafters should ensure that different categories of protected species are clearly linked to differentiated protective regimes.

Laws should make clear the **legal implications of listing**. Thus the next set of questions includes: what are the **prohibitions** associated with listing? How do different laws define what a taking is? Do laws prohibit possession of listed species? Trade? Do the prohibitions extend to parts or goods manufactured from the species? How steep are the penalties? Are they just fines, or can there be orders as well?

In Argentina, hunting and inter-provincial and international trade are forbidden for listed species (Resolution on Hunting and Trade Ban). In the UK, the law prohibits the intentional killing, injuring or taking of protected species, including wild animals listed under a schedule, and the possession or control of those or any part of specimen of those unless it is for nursing purposes or if unavoidable (Wildlife and Countryside Act, sections 9–10). In Zimbabwe, hunting of animals declared to be protected may be allowed by land owners or occupiers, upon application for licenses to the environment committee of the area. Appeals of decisions of the committee may be made to the Environmental Management Board, whose decision is final (Parks and Wildlife Act, section 77).

Legal consequences of species listed in the Red Book vary across central Asian countries. Armenia prohibits activities resulting in the reduction of population of listed species, with the exception of scientific and self-defence killing; and land users must take measures for the protection of these species that are present on their land (Law on Principles of Environment Protection, article 25). In Georgia and Kyrgyzstan, listed species can never be privately owned and can be caught only for scientific or reproductive purposes. In Kazakhstan, legal entities and individuals must take measures for the protection of listed species, in particular, when planning economic and other activities, which are prohibited if they may lead to decrease in quantity, disappearance or habitat deterioration of listed species (Law on Wildlife, article 15; Ecological Code, article 250). In Mongolia, citizens, business entities and organizations must limit the use of endangered animal species and increase their stock through, *inter alia*, their breeding and reintroduction

into their natural habitats (Environment Protection Law, article 25(1). In the Russian Federation, Turkmenistan, Uzbekistan and Tajikistan, the economic use of listed species is prohibited, and regional governments must create the conditions for conservation and breeding of protected species. In the EU, the Habitats Directive includes some provisions for the protection of specific listed species of animals for which member states must prohibit the capture or killing, as well as disturbance, destruction of eggs, of breeding sites and of resting places, and keeping and sale of wild specimens (article 12).

Australia's Environmental Protection and Biodiversity Conservation Act clearly spells out legal consequences: killing, injuring, trading or keeping a listed species, except a conservation-dependent species, is an offence, unless the action was authorized by a permit, was necessary to prevent the animal's suffering or to prevent a risk to human health or property, was for the purposes of law enforcement or occurred as a result of an unavoidable accident, in which case the person is required to notify authorities (sections 196–199).

Another set of questions for legal drafters include: what **other requirements** does listing trigger? Does the government have to make recovery plans? Study the species? Designate protected areas or habitat? Can listing trigger EIA or other procedural requirements for people or government agencies conducting projects near listed species?

In Australia, the relevant minister may, at any other time, decide whether to adopt **recovery plans** for listed threatened species and ecological communities and **threat abatement plans** for key threatening processes that bind the commonwealth and commonwealth agencies (Environmental Protection and Biodiversity Conservation Act, secs. 268–269). The minister must decide whether to have a recovery plan for a listed threatened species or ecological community within 90 days after the listing. The minister needs to ensure that a threat abatement plan is in force for a key threatening process only if it is a feasible, effective and efficient way of abating the process. The minister must consult before making such a decision (section 270A). A recovery plan or threat abatement plan can be made by the minister alone or jointly with relevant states and territories, or the minister can adopt a state or territory plan. Publication, public consultation and advice from the Scientific Committee requirements about the plan are provided for, regardless of how it is made or adopted. In the US, there are also provisions requiring the government to create recovery plans for endangered species (16 USC 1533(f)).

The legal requirement to develop recovery plans for protected species is also embedded in Canadian legislation, according to which the Canadian Endangered Species Conservation Council is responsible for monitoring and reporting every five years on the status of all species in Canada, and for communicating the progress on programs to the public. If the Minister of the Environment determines that recovery of a listed endangered wildlife species is feasible, the Committee on the Status of Endangered Wildlife in Canada must formulate a recovery strategy that addresses the threats to the survival of the species, including any loss of habitat (Species at Risk Act, section 41).

Finally, drafters should address the following questions: what are the **exceptions** to listed species protection requirements? Are there any provisions to exempt traditional or subsistence activities? If the agency has discretion to grant exemptions to others in the form of permits or other means, are there limits to that discretion? What are the standards that the agency must follow?

Australia's Environmental Protection and Biodiversity Conservation Act spells out the criteria and process for obtaining an exception permit: a person may apply to the minister for a permit to kill, take, keep, move or trade a protected species. As soon as practicable after receiving the application, the minister must publish on the internet details of the application and an invitation for comments within 10 business days on whether the permit should be issued. The minister must not issue the permit unless satisfied that:

- the specified action will contribute significantly to the conservation of the listed threatened species or ecological community concerned;
- the impact of the specified action on a member of the listed species or ecological community concerned is incidental to, and not the purpose of, the taking of the action, and the taking of the action will not adversely affect the survival or recovery in nature of that species or ecological community; and the taking of the action is not inconsistent with a recovery plan that is in force for that species or ecological community; and the holder of the permit will take all reasonable steps to minimise the impact of the action on that species or ecological community;
- the specified action is of particular significance to indigenous tradition and will not adversely affect the survival or recovery in nature of the species or ecological community concerned; or

- the specified action is necessary to control pathogens and will, so far as is practicable, keep to a minimum any impact on the listed threatened species or listed threatened ecological community concerned (sections 200–202).

In Japan, taking, killing or injuring endangered species individuals is prohibited, unless permission has been granted or in cases stipulated in a Prime Minister's Office Ordinance (Law for the Conservation of Endangered Species of Wild Fauna and Flora, article 9). The Minister of the Environment or of Agriculture, Forestry and Fisheries may grant permission for the purposes of scientific research, breeding or other purposes provided for in a Prime Minister's Office Ordinance, in which case a permission certificate is issued (article 10). When consequences linked to protected species categories include the possibility of permitted activities, the procedure to obtain relevant permissions should be indicated or clearly cross-referred to.

Species protection laws can include special exemptions for traditional or indigenous uses that have proved sustainable without outside regulation. For example, in the US, the Marine Mammal Protection Act has an exemption to allow native peoples in Alaska to hunt polar bears and certain sea mammals for subsistence purposes, and also to obtain materials for traditional handicrafts (16 USC 1371(b)). The exemption only applies if the hunting was not done in a wasteful manner. More discussion on traditional use can be found at section 6.5.7 below.

Box 5-1: Legal options for species-based conservation

- Clearly establish the responsibility, criteria and participatory processes for listing protected species, as well as the legal consequences of such listing;
- use terms and definitions that clearly target both the status and the trend in the population of the species (rare vs. threatened);
- specifically link to each category of protected species the types of protection that will be provided, ensuring that if listed, a species may be further protected by increased disincentives to poaching and incidental take. These additional requirements need to apply to both government and private actors alike;

- ensure that the legal requirements for listing and delisting are based on a scientific decision;
- require that protected species lists be regularly updated, on the basis of recent scientific information and in accordance with international listings;
- put in place means for the public to participate in the listing and de-listing process, by allowing stakeholders to submit proposals for new listings or de-listings, to provide comments on proposed listing or de-listing put forward by authorities, to review (through submission of comments or consultations) proposed listings and de-listings, to provide input and review draft protected species management or recovery plans;
- clearly state what conservation objectives must be achieved before a delisting will occur;
- where warranted, allow for the treatment of separate populations of the same species differently to account for differences in both the status and trends;
- require the responsible authority to develop species-based management plans that take into account not only status, trade, and habitat, but all uses and processes that may affect the conservation status of the species in question. Alternatively, require authorities to include specific conservation requirements for listed species into area-based management planning: this is most likely to occur in the context of forest management plans and protected area management plans, but may also find use in other planning exercises as well, such as wildlife reserves, transboundary initiatives, etc.;
- require the responsible authorities to develop a species recovery plan when species are particularly at risk, in consultation with the national scientific authority, local governments, and the public;
- clearly spell out exceptions for certain uses of listed species, establishing a transparent authorization procedure based on determined criteria, with a view to allowing sustainable traditional use.

5.2 Using an area-based approach in a participatory way

The area-based approach to wildlife conservation, which is supported by several international conventions (see chapter 1), focuses on habitat protection, a fundamental component of wildlife conservation. In so doing, it encourages managers to look beyond political boundaries and thus force a degree of local, regional, and international cooperation.

Drafters can find several criteria for area-based management in international instruments. The World Heritage Convention, for instance, links site selection with conditions of integrity, basically requesting that protected areas are large enough to comprehend essential components of the support system they represent and be sustainable. Overall, international standards require that states not establish protected areas in a piecemeal fashion, but rather that they put "systems" in place (Convention on Biological Diversity, article 8). For instance, the European Union supports a network of protected areas (Natura 2000). In addition, international standards described in Chapter 1 encourage paying attention to protection of wildlife outside protected areas, in buffer zones and ecological corridors to protect migration routes. Another key international legal standard is that the public, and in particular local and indigenous communities living in or near protected areas, should be fully involved in the selection, creation and management of protected areas.

National legislation on protected areas can specifically include wildlife conservation as a specific **objective for certain protected areas categories**. There are numerous cases in this respect. Suffice it to cite the instances of China, where nature reserves must be established in areas of concentrated distribution of rare and endangered wild animals, or peninsular Malaysia, where wildlife protection is specifically listed among the objectives of national park establishment. In other instances, wildlife and forest law provisions may create systems of area-based conservation of wildlife. This section will focus instead on **wildlife-specific area-based measures** (these are usually called wildlife reserves, refuges or sanctuaries), which may be additional to or integrated into the protected area system. This section will also highlight related issues of public participation.

To mention just a few examples, in Madagascar, the Protected Area Management Code includes wildlife reserves, which are devoted to conservation, management and reproduction of wild animals, and in which, for the purpose of protecting animals and their habitats, hunting is completely banned, except by the administration for management purposes; and partial reserves or sanctuaries, which are set aside for the protection of endangered animal communities or animal species and their habitats, and where all activities are subject to this objective.

In Viet nam, wildlife reserves, at the national or provincial level, can be created to protect a permanent or seasonal natural habitat of at least one

species on the list of endangered, precious and rare species (Biodiversity Law, article 19). In Bangladesh, the government can declare wildlife sanctuaries as areas closed to hunting, where entry, capturing of wild animals within one mile from the sanctuary boundaries and introduction of domestic or exotic animals is forbidden (Wildlife Preservation Act, article 23). In Turkey, the Ministry of Environment and Forestry or the government may declare wildlife protection areas, where wildlife species must be strictly protected and no human interference (unless carried out for protection purposes) is allowed (Hunting Law, article 4). While it is common for legislation to provide a basis for the creation of wildlife sanctuaries, there may be a lack of detailed rules establishing applicable limitations, as well as establishment and de-establishment procedures.

The law can create area-based forms of wildlife protection **outside protected areas**. Switzerland's Federal Department for the Environment adopted a 2001 Directive for the Restoration and Preservation of Wildlife Corridors to facilitate migration and other movement.⁹⁷ The corridors are categorized according to the animal species using them and the length of the route (*passage supérieur standard*, *passage supérieur réduit*, *passages inférieurs*, *zone de transition*). Related measures include the adaptation of existing corridors, their restoration and connection for effective communication. These provisions are particularly useful to ensure connectivity between different protected areas, and to provide a certain degree of protection to migratory routes, breeding and wintering grounds that for one reason or another cannot be included in the system of protected areas.

In Mongolia, in addition, the government must establish "natural disaster and emergency area zones" on areas where adverse impacts and changes have occurred that pose a potential threat to the environment and animals. In these zones, the central state administrative body, the Civil Defence Department, governors of all levels and other relevant organizations must jointly act to prevent and mitigate the effects of natural disasters and emergencies and restore the environment and natural resources. All costs for restoration of damage are borne by the state, which must request full compensation from those who are found responsible for the damage (Environment Protection Law, article 22). Similarly, Tajikistan (Law on Environmental Protection, articles 54–55) and Turkmenistan (Law on Nature Protection, article 23) can create zones of ecological emergency

⁹⁷ See www.bafu.admin.ch.

situation and zones of ecological disaster on a temporary basis to prevent or mitigate damage to wildlife. In Turkmenistan, in addition, measures for the preservation of wildlife habitats must be taken during forest use, development of tourist routes and organization of recreational activities (Law on Wildlife, article 24). These provisions seem particularly useful in providing **emergency** powers to authorities, and should be coupled with appropriate duties to inform the public. They could also be coupled with the requirement to evaluate their effects once the emergency is over, in a participatory manner, to ensure that lessons are learnt and incorporated in future emergencies, with consideration of local concerns.

As legal provisions on the creation and management of wildlife reserves are likely to affect the livelihood of rural people and traditional uses and practices of indigenous people, several countries have embedded requirements for public participation or at least consideration by authorities of local concerns in the establishment and de-establishment of protected areas. Consultation is indeed essential to the seeking of agreement among competing interests, which contributes to better land-use planning and prevention of human-wildlife conflicts (see section 7.4 below). Without detailed consultation, the less prominent members of society may lose rights and benefits. Consultation requirements, therefore, should protect the poor.

As noted more generally with regards to legal options for public involvement in decision-making (section 3.3 above), legislation may require consultations, sharing of draft plans with a period for public comment, may even delegate some decision-making to the local level or to certain stakeholders, or call for a combination of these options. In Malawi, for instance, the government must **consult** the advisory board established on wildlife matters before the declaration of wildlife reserves (National Parks and Wildlife Act, sections 26–29). Similarly, in Central African Republic, for the declaration of any of the protected areas, the law requires public consultation, including publicity of the proposal and the holding of a public hearing (Wildlife Ordinance, article 18).

In Sabah (Malaysia), the state governor can declare an area a wildlife sanctuary, if necessary to maintain wildlife habitats, ensure the maintenance of biodiversity values or ensure the conditions necessary to protect significant species of animals or plants (Wildlife Conservation Enactment, article 9). The procedure is set in detail, which contributes to provide legal certainty to the public. The proposal must include details on **traditional rights** in the proposed area and a summary of the consultations held with

relevant government agencies and of representations made by persons and communities likely to be affected. The governor must publish the declaration in the gazette. From the date an area is declared a sanctuary, no land may be alienated and no rights have effect except in accordance with the Enactment; any land title, right or concession granted, including for hunting, is void (article 11). Any person or group who objects to the proposed sanctuary or claim loss of rights may provide the grounds of the objection or the rights claimed (article 10). A claim in respect of loss of rights may be settled by agreement between the director of the Department of Wildlife and National Parks and the claimant, and any person may appeal to the High Court within thirty days of the notification. A management plan should be prepared within three years after the declaration of a wildlife sanctuary, including details of management objectives and zones for conservation and management purposes (article 13). Although the law restricts residence in and entry into a wildlife sanctuary, persons with native or traditional rights specified in the proposal may continue to exercise them, except where, under agreement with the director, the persons entitled opted for compensation (article 20).

Examples of notice and comment approach can be found in Seychelles, where the government must publish proposals to declare a reserve for three consecutive weeks, advising where a map of the area can be publicly inspected, and allowing 28 days for the public to respond (National Parks and Nature Conservancy (Procedure for Designation of Areas) Regulations, articles 2–5). In Viet nam, the establishment of protected areas instead entails a participatory process that includes collection of opinions from concerned ministries, people's committees at all levels and inhabitants lawfully living in the planned conservation zone and its adjacent area (Biodiversity Law, article 22).

A composite approach can instead be found in Mauritius, where managers must submit a draft management plan for each park or reserve to an advisory council for comments, get approval from the minister and then publish it in two local newspapers allowing 60 days for any persons to submit written comments (Wildlife and National Parks Act, article 13). Similarly, in Japan, consultation with the heads of government entities concerned, the Nature Conservation Council and local governments is followed by the communication of the designation plan "for the public perusal" for a period of 14 days, during which the area inhabitants and other parties concerned may submit their views. The government must organise public hearings whenever there are objections to the designation plan or when deemed

necessary to hear opinions broadly (Law for the Conservation of Endangered Species of Wild Fauna and Flora, article 36).

For an example of **devolution**, one can look at Burkina Faso for instance, where the Forest Code allows local authorities to create local refuges for wildlife reproduction and conservation of habitats. The wildlife administration must provide technical support to local authorities, which must ensure the participation of the representatives of concerned communities in management of local refuges, under partnership arrangements (article 97). In addition, revenues from wildlife reserves must be shared between the state and local budgets (articles 91–94).

Another interesting approach consists in the law requiring a process of **investigation** into the existing rights or interest that may be affected by the creation of wildlife reserves or other protected areas. In Mali, for instance, the government must publicise proposals to create a wildlife reserve among the concerned population by appropriate means in accordance with local usages (Decree No. 96-050/P-RM, article 3). Persons may raise claims over wildlife use, and the local administration must enter the claims into a register. A committee including representatives of various local sectors of the administration as well as hunters' associations and villages investigates possible claims. Disputes are settled amicably or otherwise brought before the competent court. Final declaration is made through a ministerial order. The government may create hunting areas, without any required formalities, in state or local authority forests, whether or not under leases (Wildlife Law, article 56).

In a comparable way, in Sarawak (Malaysia), a process to investigate rights that may be affected by the establishment of a wildlife sanctuary is in place. After the government issues a notice of intent to reserve an area, persons have 60 days to claim their rights or privileges. The law will honour only rights or privileges of a native community enjoyed for an uninterrupted period beginning from prior to 1 January 1958 to the date of the notification. The chief wildlife warden must inquire into the claim and provide a report to the controller. Where the controller finds a valid right or privilege, the controller may regulate its exercise, including identifying the areas or places within the sanctuary where it can be exercised and the manner of exercising it; proceed to extinguish such rights and pay compensation to the claimants, with the approval of the relevant minister; or permit its exercise in any other area outside the sanctuary. Persons may appeal decisions to a Sessions Court.

Following the controller's decision on the rights and privileges, the minister may, with the approval of the governor, publish the notification constituting the wildlife sanctuary (Sarawak Wildlife Protection Ordinance, articles 11–20).

In China, although there is no public consultation procedure prior to the establishment of a nature reserve, legislation demands that the government properly consider local economic development, production activities and everyday life of local residents when the nature reserves are established, delineated in their boundaries and managed (Wildlife Protection Law, article 5). As already noted, this type of approach assumes that authorities may be able to identify relevant local concerns without necessarily consulting directly with potentially affected stakeholders. This approach may, on the one hand, result in a partial or unrealistic vision of such interests, and on the other hand does little to empower stakeholders.

As noted above (chapter 3), in other instances, legislation may require that the **management plan** must ensure public participation (as in Congo, Wildlife Law, article 21). Similarly, in Liberia, the protected areas management plan should include "plans for local involvement and public participation", and in all events authorities must consult with and take into account the views of local residents in the administration and management of protected areas, creating a local advisory committee to assist in this purpose (Wildlife and National Parks Act, article 17).

Another option concerns the establishment of protected areas management bodies that include relevant stakeholders, particularly local and indigenous communities. In Brazil, each federal conservation unit has a deliberative body, comprising representatives of public institutions, civil society and traditional populations (residents in the area and users). These bodies must take in special consideration inhabitants in the reserve, in decisions regarding management plans, infrastructure development that may impact on the unit and conflict resolution. A similar case can be found in Bolivia, where the Protected Area Regulation establishes that each protected area will have a management committee (renamed management councils by the Management Councils Decree, 2000) to provide an opportunity for participation to indigenous people, communities, municipalities and provinces, as well as private institutions and social organizations (article 47). These councils have a say on all proposed activities within protected areas, support control and enforcement of regulations and oversee the implementation of management plans (Management Councils Decree, article 3). Similarly, in Costa Rica,

regional conservation areas councils (so-called CORACs) and their representatives in the national conservation areas council advise the Minister of Environment on the management of each specific conservation area (Biodiversity Regulation, articles 30–31.) The Organic Environmental Law created CORACs, under the aegis of the Ministry of Environment, as decentralized organs for the assessment, discussion, monitoring and control of environmental projects and activities (article 7). CORACs are made up of representatives of local community organizations and non-governmental organizations, public institutions and municipalities present in each conservation area.

The system in the Philippines includes a combination of various approaches outlined above. A general clause states that the administration of protected areas is possible only through cooperation among national government, local government and concerned private organizations. In addition, the law provides a detailed process for public participation for the establishment and de-establishment of protected areas, including public hearings, notices on mass media and invitations to potential stakeholders to submit comments (National Integrated Protected Areas System (NIPAS) Act, sections 2 and 5). Subsidiary legislation specifies that stakeholders are to be regularly consulted during and after the conduct of the protected area suitability assessment and the gathering of socioeconomic information. In addition, the law calls for a protected area management board for each protected area, composed of various stakeholders including representatives from villages situated in the protected area, tribal communities, NGOs and local community organizations (NIPAS Act, section 11). Furthermore, stakeholders such as tenured migrants, local government units, NGOs, peoples' organizations, local communities, indigenous peoples and other government agencies must be part of the participatory decision-making process in the establishment and planning of the management zones. Such zoning and management prescriptions must not restrict the rights of indigenous peoples to pursue traditional and sustainable means of livelihood within their ancestral domain or land (NIPAS Act Implementing Rules and Regulations, rule 10). The benefits of creating multi-stakeholder wildlife sanctuary boards is that public participation is ensured on an ongoing basis, not only when establishing or de-establishing wildlife reserves, but should be guaranteed whenever significant decisions on the management of wildlife reserves are to be taken.

In some instances, legislation also provides for **compensation**. According to Cameroon's Wildlife Decree, where third parties' rights are affected by the

creation of a protected area, the state must compensate them. To this end, the state must create a committee including the representatives of the local government and local representatives of various specified ministries to advise on any complaints that may have been raised.

In conclusion, laws that overlook concerned communities in the designation and management of wildlife sanctuaries tend to phase out or ignore existing use rights or set out prohibitions to use wildlife which, if actually applied, would result in a considerable cutback of local subsistence means and inevitably result in problems of implementation and ineffectiveness. These problems may be even more acute where rules are imposed over areas and resources (as wild animals) that have always been perceived as belonging to the local communities, regardless of legal definitions of land ownership and wildlife ownership. Clear legal provisions requiring the involvement of concerned stakeholders are therefore necessary in the context of rules focusing on conservation.

Enhanced participation of people in protected area creation and management and in the setting of conservation measures would contribute to prevention and settlement of **conflicts regarding possible land uses** as well as human-wildlife conflicts. Disadvantaged people could thus obtain direct benefits, while their involvement in the setting of rules could facilitate their access to the rule of law, the protection of their assets, and security of their initiatives. Additional benefits would generally develop from improved conservation, which could bring about opportunities for sustainable use.

Good conflict management calls for engaging the sides as early as possible, before people have committed time and resources that they cannot retrieve. It also calls for spending some time identifying the scope of the issues – both who is involved and what their concerns are. An agency may go into a plan thinking it is a wildlife management matter only to discover that to one group it is about water rights, to a second it is about recognising them as a distinct people, to a third it is about resolving land boundaries, to a fourth it is about maintaining their traditional seasonal migrations in herding cattle, and to a fifth it is about return of land the government took fifty years ago. US EIA law calls for an early scoping process, including giving notice to stakeholders, to identify issues of concern (40 CFR 1501.7).

The law can encourage the use of mediation and consensus building, but it is not always wise to require consensus because that allows a single small

interest to veto an otherwise good project. The law can also reduce conflict through clear directives that clarify the decision-making process and establish the secure nature of rights. The resulting increase in certainty encourages investments in long-term management of the resource.

Box 5-2: Legal options for area-based conservation

- Include a mandate within protected area legislation to create a protected area system that includes areas identified as critical wildlife habitat;
- require the primary wildlife management authority to designate areas outside the protected area system that should benefit from wildlife-specific protection measures, on a permanent or temporary basis, also allowing the use of certain emergency powers where needed;
- allow for flexibility so that the list of protected habitats can be easily updated in light of new scientific knowledge, compatible local needs or changed international obligations;
- ensure public participation in the establishment, management and de-establishment of wildlife reserves with due consideration of traditional knowledge and customary use of local and indigenous communities living near or in proposed protected areas by mandating:
 - an adequate process of divulging information, prior to a proposed declaration, the adoption or revision of protected areas management plans, the authorization of activities within protected areas, or the decision to de-establish a protected area;
 - a clear invitation to the public to submit comments and/or to participate in public meetings organized for this purpose prior to make the decision and/or the setting-up of a multi-stakeholder body to manage the protected area;
 - a process of enquiry into existing rights related to the proposed protected area and a system for consideration of these rights with possibility for compensation and appeal;
 - serious consideration of the observations received by the responsible authority, giving reasons for comments which are rejected, and making written documentation public with an indication of the possibility to appeal;

- specific provisions on stakeholder participation and consideration of traditional use and practices within protected area management plans. Furthermore, stakeholder participation in the efforts to conserve wildlife and opportunities to share the benefits arising from wildlife conservation should also be specifically addressed by management plans, giving priority to local communities;
- provision of extension on the objectives and needs of any protected area to concerned stakeholders. Ideally, access of local communities to professional advice so that their interests may be adequately represented should be supported.

5.3 Involving local stakeholders in wildlife conservation

Without local communities having a significant stake in the management of local resources (that is, by empowering stakeholders and making them accountable), the efforts of under-staffed and poorly financed officials to patrol and protect wildlife will often be futile. The absence of such a stake both reduces the incentives of local communities to comply with the law and prevents them from insisting on the compliance of outsiders, including government officials. Therefore, the needs of local communities who live with and are affected by the use and conservation of biological diversity, along with their contributions to its conservation, should be reflected in the equitable distribution of the benefits from the conservation of those resources.

As discussed earlier, the work programme on protected areas of the Convention on Biological Diversity calls for communities to have a role in decision-making and management, particularly ensuring full consultation before any resettlement, full engagement in matters that affect their rights, and equally full recognition of their responsibilities (chapter 1). Some of these standards are reflected in national legislation. In the Philippines, for instance, public authorities have no power to evict indigenous communities or to resettle them to another area without their consent. Rules and regulations affecting indigenous communities are subject to notice and hearing with the members of the indigenous community concerned. The draft wildlife legislation of Angola takes a more comprehensive approach to the issues that may arise in relation to local people and protected areas, specifically addressing communities' presence and involvement in protected

areas. The draft legislation protects human settlements in protected areas, provides guarantees for the **relocation** of people when justified by environmental necessity, and creates a series of incentives, benefits and rights to participate in planning for local communities. In Swaziland, land belonging to indigenous people cannot be declared as a park without obtaining the written permission of the *ngwenyama* (ruler), who may impose restrictions as he may deem fit (National Trust Commission Act, section 12).

This section will explore legal tools to empower stakeholders, in particular local and indigenous communities, to manage wildlife reserves and other protected areas targeting wildlife conservation (in addition to participating in decision-making, which was discussed in the previous section). This may be even provided for at the level of the constitution. In Bolivia, the new constitution establishes that protected areas that overlap with traditional indigenous territories will be **co-managed** according to the procedures and regulations of the indigenous communities, while respecting the objectives of the creation of the protected area (article 385 II). Similarly, the Constitution of Ecuador calls upon the state to promote the participation of communities and peoples in the management of protected areas that were inhabited since ancestral times (article 405). It grants communities the right to participate in the use, benefits, administration and conservation of renewable natural resources found on their lands (article 57). This concept translates in practice into the legalization of unregistered wildlife operations by local communities.

Usually the law calls for the conclusion of **agreements** to formalize co-management or community-based management. Legislation addresses communities' involvement in the management of protected areas in Burkina Faso, for instance, where local refuges may be managed in collaboration between the local wildlife administration and representatives of concerned communities, under partnership arrangements (Forest Code, article 97). In Gabon, every national park must have an outer area within which local villages are to be involved, based on the identification of communities with which permanent collaboration is to be established in relation to the park's management (Forest Code, articles 13 and 15–16). Usage rights within these areas, including hunting, are generally free, subject to a management contract between the communities and the park's manager. In South Africa, under the Protected Areas Act, the management authority may enter into an agreement with another organ of state, local community, individual or other party for the co-management of the area or the regulation of human activities that affect the environment in the area. The agreement may provide for

delegation of powers, benefit sharing, use of biological resources, development of local management capacity and knowledge exchange.

Sometimes legislation may restrict the group of possible beneficiaries of these schemes. In the Philippines, the administration must enter into protected area community-based resource management agreements with the tenured migrant communities of protected areas. Within one year from the agreement, tenure holders must prepare a community resource management plan (Implementing Rules and Regulations to the National Integrated Protected Areas System Act). In Mexico, the Ecological Balance Law allows wildlife use in protected areas only to communities or landowners living or owning these lands prior to their establishment as protected areas, subject to the conclusion of an agreement with the relevant authority to determine the type of uses allowed and ensure sustainability (articles 47–47 bis).

In Australia, indigenous protected areas have been established under the "Caring for our Country" initiative. An indigenous protected area is land managed for conservation and cultural heritage protection by its indigenous traditional owners. Traditional owners enter into a voluntary agreement with the Australian Government, and the government provides some funding to help them fulfil their conservation and management objectives, further providing direct employment and supporting the development of cultural and eco-tourism ventures (Fourth national report to the CBD: 39).

Usually, legislation specifies the content or scope of these agreements, as well as applicable conditions. In Australia, conservation agreements between the Commonwealth and persons related to the protection and conservation of biodiversity and world heritage values, among others, may relate to public or private land. The minister must not enter into a conservation agreement unless satisfied that the agreement will result in a net benefit to biodiversity conservation and is not inconsistent with a recovery plan, threat abatement plan or wildlife conservation plan. The agreement may provide, for example, for activities that promote biodiversity conservation, control or prohibit actions that may adversely affect species and habitats, restrict the use or require the owner to refrain from certain activities, require the owner to contribute towards costs or specify the manner in which any money paid to the owner is to be used (Environmental Protection and Biodiversity Conservation Act, sections 303–306).

Other options may be **project- or programme-based**. In Japan, the conservation, restoration or creation of various natural areas including *satoiyama* (community-based forests) and *satochi* (rural landscapes) happens with the participation of various actors in the community, including concerned government agencies, municipal authorities, local residents, NGOs and individuals with specialized environmental knowledge (Law for the Promotion of Nature Restoration). On the basis of nature restoration policy, which was adopted in April 2003, responsibility for nature restoration projects rests mainly with the person who undertakes the project and the community actors. The national and local governments must "strive to provide the necessary assistance to facilitate the implementation of nature restoration projects undertaken by local residents, specified non-profit corporations and other private organizations", while the developer must "strive to take the lead" in carrying out the project. In this regard, the developer should form a nature restoration committee including all parties who intend to be involved in the project, to draft the overall plan for nature restoration, discuss the draft implementation plan and conduct communication and coordination for implementing the project; submit the drafts to the competent minister and prefectural governor for receipt of advice; and conclude an agreement with the landowner of the area if needed. Although the law does not specifically mention wildlife, it is acknowledged that many species, including threatened species, live mainly in *satochi* and *satoiyama* areas. In Canada, the Wildlife Ministers' Council created a voluntary land stewardship programme called Natural Legacy 2000. The program will protect Canada's wildlife and habitats by motivating Canadians to be active stewards of their local environments through a series of financial incentives.⁹⁸ A copy of the stewardship action plan must be included in a public registry (Species at Risk Act, section 10.1).

The establishment of **committees**, as mentioned above, may also be a tool to formalize community-based conservation initiatives. In the Philippines, organized tenured migrant communities and indigenous peoples manage, use and protect the resources within the protected area and buffer zones. A committee is to handle all matters related to the community-based programme, composed of the regional technical director for protected areas as chair, members from the local government unit concerned and selected members from the protected area management bureau. Specific guidelines have been developed to provide for four stages in the establishment and

⁹⁸ See www.on.ec.gc.ca.

management of a community-based programme in protected areas. The protected area management bureau monitors compliance with the terms and conditions of the community-based management agreement, and the protected area superintendent submits biannual reports on the agreement's implementation.

In Australia, jointly managed commonwealth reserves are established to include indigenous peoples' land held under lease by the Director of National Parks. The relevant minister must establish a board for such reserves, if the land council for that land (or traditional owners) and the minister agree upon this. The board's role is to make decisions and plans for management of the reserve, in conjunction with the director. A majority of its members must be indigenous people nominated by traditional owners if the reserve is wholly or mostly on indigenous people's land.

A combination of the above-mentioned tools is also possible. In Bangladesh, a new programme called *nishorgo* has been launched, building partnerships between the Forest Department and key local, regional and national stakeholders that can assist in conservation efforts. It formalizes collaborative management agreements between the Forest Department, local communities and other key partners; offers alternative income-generating opportunities to those presently living from forest resources; and builds the capacity of key stakeholders. The Ministry of Environment and Forests issued a government order by gazette notification on 15 May 2006 regarding the formation of eight co-management councils and co-management committees, including their terms of reference for five protected areas brought under the *nishorgo* programme. The establishment of co-management councils and co-management committees aims to ensure local participation in protected area management and include a wide membership from different sectors of society, from government representatives to local inhabitants (Hossain, 2008).

Area-based approaches are also possible. In the Philippines, the management of buffer zones provides opportunities for community partnership in the management of protected areas. The establishment of buffer zones as "social fences" entails interventions such as social preparation, community organizing and empowerment to ensure its effectiveness, without prejudice to the exercise of police power if necessary. The protected area management bureau manages the buffer zone and must ensure participation of local government units, other government agencies,

NGOs, peoples' organizations and other concerned stakeholders. Rights over private lands within the buffer zone are to be recognized and respected in a manner consistent with the management plan (NIPAS Implementing Rules and Regulations).

Another interesting example, from Brazil, is the "*Jacaré do Pantanal* (*Caiman crocodillus yacaré*)" case concerning community-based ranching in protected areas. Several ministerial resolutions on caimans regulate ranching and allow collecting eggs from the wild and using them for breeding and commercialization (Aguilar and Morgera, 2009).

In New Zealand, the relevant minister vests a reserve in a **trustee**, following a public consultation procedure and after consultation with the relevant conservation board and fish and game council. Voluntary organizations may also be appointed to manage and control a reserve. Management of the reserves follows the statements of general policy, and conservation management strategies and plans (Reserves Act, sections 119–120 and 29–30).

In Japan, the law provides for the formulation and implementation of **species-based programmes** for rehabilitation of natural habitats and maintenance of viable populations by the Minister of the Environment, following consultation with the Nature Conservation Council. Such programmes are formulated on a species-by-species basis and are subject to public perusal before their implementation. Land owners or occupants must make efforts to cooperate for the installation of necessary facilities under the approved programmes (Law for the Conservation of Endangered Species of Wild Fauna and Flora, articles 45–47).

Overall, there may be no major difference in the different approaches to the legal recognition and encouragement of community-based initiatives for wildlife conservation, as long as the legal basis is clear and comprehensive. In this respect, to create a real stake for communities to participate in wildlife conservation, legislation should clearly indicate the **grounds for termination** of community-based conservation rights, ensuring that a fair process for ascertaining the existence of such grounds and for appealing against decisions are available. In South Africa, for instance, the law specifies that the relevant minister may cancel a co-management agreement after giving reasonable notice "if the agreement is not effective or is inhibiting the attainment of any of the management objectives of the protected area" (Protected Areas Act, section 42). In the Philippines, grounds for

termination or cancellation of the agreement for community-based programmes within protected areas and buffer zones include neglect or violation of its terms and conditions, violation of environmental and natural resource legislation, conduct of non-authorized uses or when the national interest so requires. These provisions are a starting point, although an approach that may also favour capacity-building among relevant communities could rather provide the possibility for communities to have their rights suspended first, with the opportunity to remediate the damage caused or to show improved management, rather than terminating their rights at the first instance of non-compliance. In addition, public authorities should be mandated to provide technical support to communities upon their request, as well as to clearly indicate to them what types of action would be needed for communities to be brought back into compliance.

Finally, opportunities for stakeholder participation in wildlife conservation should also take into account traditional use, and where compatible with the conservation objectives, should allow local communities' traditional use of certain resources to continue in protected area. Limitations of traditional uses should be limited to what is actually necessary for wildlife conservation and in certain instances compensated (see section 6.5.7 below).

Box 5-3: Legal options for stakeholder involvement in conservation

- Create a legal basis for the involvement of local stakeholders, including indigenous and local communities, in wildlife conservation initiatives to provide those involved with legal certainty and possibly equitable benefits for their efforts, taking into account monetary and non-monetary benefits;
- require the administration to inform communities about opportunities to create a community-managed area or otherwise involve stakeholders in the protected area management;
- give a fair opportunity to any persons living in the area or having strong traditional ties to it to participate in community-based management;
- identify selection criteria for the case in which more than one group or community may be interested in arrangements concerning the same land; set up a process for verifying relations among the members of the group or community applying to manage natural resources (representatives must have been appropriately designated and may have to be periodically

reappointed; there must also be a clear agreement among community members about respective rights and obligations and sharing of benefits; the ability and willingness of the group or community to undertake the relevant activities as well as to manage funds; the suitability of the area and availability of resources for the proposed activities;

- require that the body administering the area undertake broad consultations with various concerned actors, including central and local government, neighbouring communities, traditional authorities, as may be appropriate;
- set up a process for the identification and consideration of existing rights of occupancy or use over the concerned area, providing either for their accommodation into the arrangement, upon agreement of right holders, or for their compensation if extinguished;
- provide for the conclusion of an agreement setting out respective rights and obligations (including a simple management plan based on an inventory of resources and setting out activities to be undertaken, prohibitions, payments due, assistance to be provided, duration, applicable conditions, etc.) between the administration and the group or community;
- empower the group or community to issue its own binding rules regarding the activity being undertaken, including rules on land access and use by the same group and by third parties;
- provide for enforcement of any relevant applicable rules within the concerned area, including where appropriate enforcement by members of the group;
- set out instances in which agreement can be suspended or terminated by the administration; if the agreement is unilaterally terminated for reasons independent from the conduct of the community, the latter should be compensated;
- establish the consequences for violations (grounds for suspension and termination, compensation), providing an opportunity for communities to remedy the non-compliance within a certain deadline before deciding on termination of their right;
- set out procedures for effective settlement of disputes;
- require the administration to provide information, training, advice and management and extension, upon request of the community or when suspending their rights.

5.4 Protecting wildlife from harmful processes and land uses

Wildlife conservation does not only entail the protection of species or of their habitats from activities directly affecting them (such as off-take and trade), but also protecting them from activities that may indirectly harm them. Industrial developments, construction, tourism and mining operations may result in a serious disturbance to wildlife species or in the destruction of their habitat. In addition, competing land uses (forestry or agriculture) may also affect wildlife, and usually different pieces of legislation may regulate in different (and sometimes conflicting) ways their impacts on wildlife.

In other words, human activities may harm adjacent or other ecosystems.⁹⁹ In accordance with the Convention on Biological Diversity, countries must identify and control all potential sources of adverse impacts on biodiversity, and carry out environmental impact assessments of projects likely to have "significant adverse effects" on biodiversity (article 14). In particular, the CBD guidelines recommend that the following should be specifically taken into account: activities directly or indirectly affecting legally protected species, threatened species or species protected in respect of migration, breeding or commercial trading; activities taking place in legally protected areas or their vicinity; introduction of invasive alien species; activities that directly or indirectly affect species not yet legally protected but threatened or sensitive; extractive species activities (including hunting); activities leading to reproductive isolation of species; and activities in biologically important areas (chapter 1). Wildlife laws, therefore, should provide tools for the detection and mitigation of these impacts.

General environmental legislation and sometimes also wildlife-specific legislation may require **environmental impact assessment** (EIA). EIAs may be required to assess impacts from the use of specific arms, hunting methods, or commercial exploitation; from projects that may affect migratory routes or protected areas; from the proposed introduction of new species into the environment; or from activities that may restrict existing use of natural resources. In Ghana, projects for which environmental assessment is required include logging near wildlife reserves (Environmental Assessment Regulations); while in Seychelles activities in a protected or ecologically sensitive area – thereby explicitly including natural habitats for rare protected or endemic species of fauna and flora – should be subject to EIA

⁹⁹ CBD Decision VII/11, Annex, principle 3.

(Environment Protection Act, article 15). In Kenya, on the other hand, activities that require an EIA include the "establishment or expansion of recreational townships in mountain areas, national parks and game reserves" (Environmental Management and Coordination Act, second schedule), while an EIA licence is required for any activity which may have an adverse impact on an ecosystem, leading to the introduction of any exotic species or the unsustainable use of resources. In Lesotho, EIAs are requested for projects that may affect bird migration sites (Environment Act, section 28). In Mozambique, the principle of prevention and prudence enshrined in the Wildlife Law (article 3) calls for an environmental impact assessment before the introduction of new species and technologies in the wildlife sector. The Regulation on EIA of 2004 includes, among the projects for which EIA is mandatory, the creation of national parks, national reserves, ranches, wildlife management areas and buffer zones, as well as commercial exploitation of wildlife and the introduction of exotic fauna species (Annex 1). In addition, an EIA is still mandatory for other activities, when the proposed activity may result in a restriction of the use of natural resources (article 14).

In Armenia, EIAs are mandatory for a list of activities that may harm fauna (Law on Environmental Impact Assessment): this formulation may however be too general to have any practical effect. In Kazakhstan, instead, an indication of the threshold at which EIA becomes necessary is provided: planned activities must not cause "irreparable damage" to animals (Instruction n. 204 of 28 June 2007). In particular, the process includes an analysis of the initial condition of fauna; the presence of rare, endangered species and species included in the Red Book; and the impact and possible negative effects on animal populations, their habitats, migration routes, reproduction conditions, places of animal concentration, and wildlife diversity fluctuations. The EIA should also identify opportunities to preserve and even enlarge natural communities and to monitor project impacts. In Bangladesh, EIAs are required for drainage and irrigation projects that may impact wildlife habitats (Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 1987, Schedule, section 3).

In Latin America, cross-references between wildlife legislation and EIA legislation are infrequent, although several countries require EIAs for breeding operations or activities in protected areas (Bolivia, Costa Rica, Chile, Guatemala, Mexico and Peru). In Belize, EIA legislation explicitly mentions the protection of wildlife from harmful activities. In performing EIAs for projects that may significantly affect the environment, developers

must consider the effect of development on fauna (Belize Environmental Protection Act, section 20). Similarly, in Guyana, general EIA provisions also address the protection of wildlife from harmful effects. An independent person approved by the Environmental Protection Agency must carry out each assessment, and the person must consider the effect of the proposed project on fauna and species habitats (Guyana Environmental Protection Act, section 11). In Brazil, a wildlife management plan is required in private lands prior to the granting of environmental licenses for development projects that may impact on wildlife in accordance with the Environmental Policy Law (2007 Regulations on wildlife-related procedures for environmental licensing and impact assessments).

All Australian states and territories include impacts on biodiversity or on species and habitats as a matter for consideration in EIA, including actions likely to have impacts on listed threatened species and ecological communities, listed migratory species, Ramsar wetlands or World Heritage properties. These considerations apply through development control regulations associated with land use planning, infrastructure development, and natural resource management laws. The regulations generally prescribe a hierarchy of impact assessment processes with environmental impact statements (or their equivalent) as the peak EIA document, and the structure and content of development applications including environmental impact statements (Tsioumani and Morgera, 2010).

In addition, national laws may require specific **wildlife impact assessments**. In Zambia, state or private plans or activities that may have an adverse effect on any wildlife species or community in a national park, game management area or open area are subject to a wildlife impact assessment, upon request by any person. Existing or anticipated impacts upon wildlife, including an account of the species, communities and habitats affected and the extent to which they are, or may be threatened, and endangered species which are, or may be affected, are to be taken into account. Reference is made to the procedures specified by the Environmental Council under the Environmental Protection and Pollution Control Act. In Tanzania, where a project or activity is likely to adversely affect wildlife species and/or habitats of communities, a wildlife impact assessment must be conducted (Wildlife Conservation Bill, section 35). In Malawi, any person may propose that a wildlife impact assessment be conducted of any existing or proposed process or activity that may have an adverse effect on wildlife. Following such a request the minister may call for an

assessment that must include recommendations for subsequent government action (National Parks and Wildlife Act, sections 23–25). In Australia, in addition to general provisions on EIA mentioned above, the threatened species laws of each state also apply EIA (or species impact assessment) aligned with planning, development and resource management laws through EIA standards and governance provisions (Fourth national report to the CBD).

Requirements for EIAs or specific wildlife impact assessments may also be useful tools to support **participatory approaches** to wildlife management, but of course they only apply to cases in which a significant environmental impact on wildlife is expected and thus do not constitute a regularly applicable participatory mechanism in wildlife conservation. They may significantly contribute to conservation efforts, but may not give rural people a voice in ordinary management decisions. They should therefore be pursued, but as part of a broader approach to ensure participation more broadly in wildlife-related decision-making.

In Mozambique, public participation throughout the EIA process is guaranteed, through information, consultations, request for clarification, submission of comments and suggestions (EIA Regulation, article 14). In Kazakhstan, public access to information is ensured while undertaking the EIA; and public hearings must be organized (Instruction No. 204 of 28 June 2007).

In China, public participation is expressly – albeit generally – provided for in the EIA legislation (2002 EIA Law, article 4). In addition, there are explicit links to EIA legislation in wildlife legislation. If a construction project produces adverse effects on wildlife under special state or local protection, the construction project proponent must submit an EIA report, and the Department of Environmental Protection will examine and approve the report, seeking the opinion of the Department of Wildlife Administration. Relevant units, experts and the public are encouraged to participate in any appropriate way (Wildlife Protection Law, article 12). Regarding the plans that may cause adverse impact on the environment and directly involve the environmental rights and interests of the public, the proponent of the special plans should, before submitting the draft plans for approval, hold fact-finding meetings, hearings or other types of consultations to solicit the opinions on the draft EIA statements from relevant units, experts and the public. The proponent should seriously consider these opinions and explain the consideration given to the opinions in the EIA statement submitted for examination (EIA Law, article 11). The same procedure is provided for the

final EIA reports of construction projects, prior to their approval by the competent departments of environmental protection.

In Viet nam, EIA is due by law for projects in or with adverse impacts on national parks and sanctuaries and protected ecosystems and for projects to exploit natural resources on a large scale. Legal entities and individuals may send petitions and recommendations concerning environmental protection to the appraisal council and the project-approving agency, which the agency should take into consideration before any conclusion can be taken (Environmental Protection Law, articles 17–20). In Turkey, the 2008 EIA regulation requires to consider "sensitive areas" such as protected areas, Wildlife Development and Protection Areas, forests, Ramsar wetlands sites, habitats of endemic species and Natural and Cultural Heritage Areas. The EIA is carried out by a committee, composed of representatives from relevant state institutions and agencies (in particular from the Ministry of Environment) and project proponents, as well as of representatives of civil society organizations (e.g. universities, research agencies, unions), which may be invited when necessary. The committee must also organise a local community meeting to discuss the project. In Kyrgyzstan and Uzbekistan, public expert opinions or "ecological expertises" are produced at the initiative of citizens or public interest organizations with a view to informing decision-makers. The resulting statements, however, are merely recommendatory (Morgera, Fodella and Wingard, 2008).

Overall, either general EIA legislation or specific wildlife legislation should ensure that EIAs cover impacts on wildlife from changes in land uses or harmful activities. Legislation should also clearly allow access to information and public participation in the conduct of EIAs.

One additional option is to identify (and perhaps include in an official list) **key threatening processes**, and require certain authorities to develop recovery plans for each listed threatened species or a "threat abatement plan". Another option is to provide subsidies to other land uses that are not detrimental to the conservation of wildlife. This is the case of the EU and Switzerland, where non-intensive agricultural practices that have limited impacts on habitats and wildlife species are supported or promoted (Cirelli, 2002).

Box 5-4: Legal options for protecting wildlife from harmful impacts

- Request the assessment of any processes that may be harmful to wildlife (usually through an environmental impact assessment or wildlife impact assessment), specifying all steps and minimum requirements (such as the need to consider all alternatives);
- specify whether such assessment would be necessary for any economic, administrative or other activities directly or indirectly impacting on wildlife and their habitats;
- allow the public to request such an assessment, and to participate with information or comments in the assessment requested by public authorities;
- specify the legal implication of these assessments – for example, whether expected negative impacts would impede the carrying out of the proposed activity altogether, or whether the activity would be carried out but only in accordance with specific requirements necessary to minimizing negative effects or remedy to them;
- impose restrictions on the types of activities that can be undertaken, prohibiting any activities that are likely to cause irreversible damage to wildlife and its habitats;
- if general environmental legislation already provides EIA rules applicable to wildlife, clarify in wildlife law the link with general rules on environmental impact assessment, to avoid legislative conflicts and difficulties in interpretation; in particular:
 - avoid duplicating requirements under EIA and other licensing or planning procedures; for example, if a licensing or planning requirement already requires consideration of alternatives, analysis of impacts, stakeholder consultation, and so forth, it could be exempted from EIA;
 - if a licensing or planning requirement may be significant enough to trigger EIA, ensure that deadlines for government action are flexible enough to allow to undertake the EIA;
- take into account the possible negative impacts on wildlife of competing land uses (by referring to restrictions and other requirements under legislation regulating forestry, agriculture, mining and tourism, for example);
- establish a general obligation for mitigation of harmful activities;
- list key threatening processes and request the development of a recovery plan for affected wildlife.

5.5 Wildlife health

Possible health conditions of wild animals should also be taken into account by legal drafters. Avian influenza has shown how significant this issue is not only for wildlife conservation, but also the protection of human life.¹⁰⁰ In some countries, this may be covered comprehensively by veterinary laws, so wildlife law drafters should ensure that cross-references, as well as institutional coordination clauses, are in place where necessary. In other instances, there may be a gap: neither veterinary laws nor wildlife laws address the issue of wildlife health and its possible impacts on the health of domesticated animals and humans. A thorough review of existing legislation on this aspect may therefore be very useful in this respect, as may be also interviews with animal health and protected areas services in the country.

Specific provisions may also be envisaged to require healthy conditions for captive wild animals. Humane and healthy standards for captive wildlife kept for breeding or tourism purposes are sometimes required to ensure the safety of these animals and their keepers. Captivity and the increased concentration of animals in enclosures can increase an animal's susceptibility to disease (see section 6.3 below). Human handlers are also exposed to these pathogens and there is an increased health risk for zoonotic diseases, including rabies and many other fatal infections. Injuries to both animals and human handlers (bites/scratches) are also a risk in poor captivity conditions. Permits for captive wildlife are usually required, but they appear to concentrate on the risk for environmental damage rather than on the captured animals' health and well-being. In countries where the sale of hunted and trapped wildlife is allowed, it is important also that trade be monitored and controlled. Meat inspections for commercial products are recommended as wild caught meat is prone to disease and parasitic infections. In markets where the sale of live wild animals is permitted, regulations should be in place separating them from domestic species, so as to avoid creating a situation of exposure to novel infections and disease in both groups.¹⁰¹

Specific references to wildlife health are scant in national wildlife legislation. A few exceptions to this general trend can nevertheless be provided. In Angola, for instance, the draft wildlife law charges the ministry responsible

¹⁰⁰ See Vapnek, J. 2010. *Regulatory measures against outbreaks of highly pathogenic avian influenza*, FAO Legal Paper Online No. 82.

¹⁰¹ For more information, see www.fao.org.

for forestry with the task of identifying, preventing and controlling pests and diseases affecting wildlife. To this end, this ministry should establish a system of early warning and develop plans for the eradication of pests and diseases affecting wildlife, which may include quarantine for affected wild animals and the demarcation of infected areas. In Viet nam, managers of biodiversity conservation facilities must take measures to prevent epidemics and treat animal diseases (Biodiversity Law, article 43). In the Philippines, killing wildlife is allowed when wildlife is afflicted by an incurable communicable disease (Wildlife Act, article 27). In Turkey, provisions on how to handle a disease outbreak in breeding sites are included the Regulation on Keeping and Trading of Game and Wild Animals and of their Products. In India, representatives from departments dealing with Home and Veterinary matters sit on the advisory committees managing wildlife reserves (Wildlife Protection Act, sec. 33B). Many countries require animal health certificates for imports or exports of live wild animals, carcasses or trophies (in Gabon and Lao PDR, for example).

Overall, it should be noted that wildlife health issues may often be overlooked in national legislation and would instead deserve specific attention. Legal drafters should first clarify whether applicable rules on this can be found in general animal health legislation: if they exist, they should be clearly linked to wildlife law. If they do not exist, their creation and appropriate placement in the broader legal framework of a country should specifically be discussed, for the benefit of the environment as well as of human health. Institutional cooperation should also be ensured, as different expertise and information may be needed. The poor may be those that will be more negatively affected by the spreading of disease.

Box 5-5: Legal options for wildlife health

- Allocate clear responsibilities to certain authorities for identifying, preventing and controlling pests and diseases affecting wildlife;
- require coordination and information-sharing between wildlife, veterinary, customs, and other authorities to address wildlife health issues;
- allocate clear responsibilities in respect of wildlife health for breeders and managers of protected areas and hunting areas.

5.6 Human-wildlife conflicts

As discussed in Chapter 1, IUCN contributed to raising awareness about human-wildlife conflicts at the international level. IUCN suggests that governments prioritise management decisions, undertake planning and action for preventing and mitigating human-wildlife conflict, and incorporate global, regional and local mechanisms to ensure that these issues are properly addressed. Governments are also encouraged to designate and allocate adequate financial resources for supporting programmes targeted at prevention and mitigation of human-wildlife conflicts.

Legislation can contribute to the reduction of human-wildlife conflicts, thus alleviating the costs to some of the less advantaged people in rural communities. Clear direction on or protection from liability could facilitate private or community wildlife management initiatives. Usually, provisions related to human-wildlife conflict can be found in instruments dealing with wildlife tenure and use rights, protected species or management planning. The main legal approaches in this respect include listing of problem animals, obligations linked to permitted killing, compensation, consultation, prevention and planning.

Killing wild animals in self-defence, in defence of another person, or sometimes also to protect property, is often not considered an offence in the legislation. In Latin America, several countries allow the killing of "problem animals" as an exception to general hunting bans (Argentina, Chile and Brazil), although these regulations create loopholes that can frustrate wildlife legislation enforcement. In Bangladesh legislation clarifies that it is not an offence to kill animals that threaten human life or damage crops or livestock as long as it is outside of protected areas (Wildlife Preservation Order, article 21). In the US, the federal Endangered Species Act permits killing of a protected species in "good-faith belief" of preventing bodily harm (16 USC 1540(b)(3)).

Sometimes these provisions are qualified by the need to take "reasonable measures" (Sudan), or by limiting lawful killings to absolute necessity (Liberia). Thus, in Liberia and Kenya, self-defence must be proven by the person claiming it, may not be claimed if the animal has been provoked or the person was breaking the law. Property owners must fence or otherwise protect their land so as to prevent the entry of wild animals and inform authorities immediately of any damage to crops or property by a wild animal (Cirelli and Morgera, 2009b). In Malaysia, a person may take reasonable

measures to defend human life, livestock, crops or other property from attack or damage by protected animals, although the use of a firearm may only be resorted where no other alternative is possible. For totally protected animals listed in a schedule, only defence of human life applies (Protection of Wildlife Act, article 55).

Lao PDR distinguishes between **protected and non-protected species**. In the latter case, citizens have the right to capture or kill restricted animal species when such animals are threatening human lives. Before or at least after killing, the citizen must request approval or send a report to the relevant authorities. The latter requirement to report the circumstances to responsible officials as soon as possible is often used in wildlife legislation to prevent abuses. Frequently, the hunter must make a **report** of the killing to authorities within a certain deadline (24 hours in Liberia), or at least for certain protected species (Ghana). In Malaysia, action taken in response to an attack of a wild animal must then be reported immediately to the nearest authorized officer (Protection of Wildlife Act, article 55).

Another way to eliminate possible reasons to abuse rules on permitted killing for human-wildlife conflicts is to declare by law that animal killed for defence remains the property of the state (as is the case in Malaysia, Sudan and Lao PDR).

In other countries, killings must be specifically **authorized**. In Viet nam, when forest animals threaten property or life, people should first try to drive them away, without harming them. Outside special-use forests, concerned individuals need to write to the president of the people's committees for permission for trapping or hunting such animals. For particularly precious and rare animals such as the elephant, rhino, tiger and leopard, the consent of the Agriculture and Rural Development Ministry and the Natural Resources and Environment Ministry is further needed (Decree No. 32/2006/ND-CP, article 11). Similarly, Oregon Revised Statute 498.012 declares that "Nothing in the wildlife laws is intended to prevent any person from taking any wildlife that is causing damage, is a public nuisance or poses a public health risk on land that the person owns or lawfully occupies." However, the law requires persons to get a permit from the state first, unless the animal is one of four listed predator species, and requires the person to give the state the carcass of certain protected species.

In other instances, legislation may even prescribe the killings, not just tolerate them. In Swaziland, the Minister of Agriculture can direct the owner of any holding (including Swazi Nation indigenous peoples) to reduce any species of game that the minister deems to constitute a danger to stock, crops, grazing, or other natural resources. If the owner fails to act within one month, the minister may undertake measures to perform such reduction and expenses incurred by the minister may be offset by the sale of carcasses of any destroyed game (Game Control Act, articles 3, 5 and 8). In Congo, the administration may organize culling operations (*battues administratives*) for animals that constitute a danger to persons and their property (2008 Wildlife Law, article 66). In these cases, public consultations or at least the obligation to justify the measure would be needed to ensure legitimacy of such initiatives.

Legislation may also mandate the **listing of "problem animals"** or "dangerous animals", which is usually coupled with exceptions. Frequently, rights are granted to land owners (but also, to some extent, other people who may suffer damage) to kill these animals. In some places, limitations to these rights are considered unjustified and it is argued that the right to self-defence should be further extended. In Namibia, for example, the applicable provisions have caused problems to conservancies because only animals threatening people or livestock may be killed, while the considerable damage they cause to crops and structures does not justify action (Boudreaux, 2008).

In few instances, legislation also addresses the question of **compensation** for damage caused by wildlife. In Kenya, where any person is injured or killed by an animal, his/her dependants may apply to a district committee established for the purpose of providing compensation, unless the person was committing an offence, or the injury or death occurred "in the course of normal wildlife utilization activities". The committee must include some specified officials of the district and county level and three other members appointed by the minister to "represent the general public" of the district (Wildlife Conservation and National Parks Act, articles 30–32). In China, when wildlife under special state or local protection causes losses to crops or other losses, the local governments must provide compensation, according to criteria to be formulated by governments of provinces, autonomous regions and municipalities directly under the central government (Wildlife Protection Law, article 14; terrestrial wildlife regulations, article 10). Switzerland provides compensation for damage caused by wild animal species. The cantons determine the amount of damage caused and verify its

causes, while the federal council prepares the list of animal species for which such compensation is available and sets conditions for the payment of compensation (Hunting Law, article 12).

In Botswana in accordance with regulations, compensation may be paid to any person who has suffered damage from the action of an animal. The provision does not specify who would be liable to pay, nor does the Fauna Conservation (compensation for destruction of livestock and other property) Order, adopted under the wildlife legislation previously in force, serve to clarify this point. Presumably compensation would have to be paid by the owner of the wild animal, who may only be deemed an owner if the land from which the animal came was fenced. The state would therefore be responsible in all other cases. This would be in patent conflict, however, with another provision of the act, by which the state is exempted from any liability for damage caused by wild animals (Cirelli and Morgera, 2009a).

In France, if game subject to a management plan or residing within a hunting reserve causes agricultural damage, the hunters' associations owe compensation. A national commission for compensation of damage caused by game determines the maximum for the compensation and deals with any such claims as a last instance authority (Environmental Code, articles L426-1 and -5). Although compensation for damage caused by wild animals may provide some relief in human-wildlife conflicts, the practical difficulties of formulating and implementing effective compensation mechanisms argue against such schemes. Also, compensation schemes do not address the cause of the problem but simply the symptoms, do not encourage precautionary measures and indirectly support agricultural intensification – which may be unsustainable in certain areas (Lamarque et al., 2008¹⁰²). Nonetheless, assuming that financial resources are available and that their use for compensation does not deprive other wildlife programs of funds, legal frameworks could be strengthened to make compensation schemes more effective.

Kosovo legislation includes two interesting points in this area: the payments come from the local hunting managers, giving them an incentive to prevent conflicts, and to claim payment it is necessary to demonstrate that one took specific reasonable precautions to prevent the damage. These include

¹⁰² Reporting the position of various authors and of the IUCN African Elephant Specialist Group and the Human-Elephant Conflict Taskforce

reporting damage to the hunting manager at the earliest sign, to allow the manager to try to prevent it from continuing, and letting the hunting area manager come on the land to take steps to discourage the animals (Law on Hunting, articles 49–54).

Evidence of wildlife damage may be short-lived. The law can require the injured party to report damage promptly and can require the government to inspect the evidence without delay.

A more comprehensive approach to the management of human-wildlife conflicts would entail the involvement of communities mostly affected by the conflicts in the identification and implementation of **strategies to prevent** and fight conflicts (Lamarque et al. 2008). In December 2007, Namibia adopted a "National Policy on Human-Wildlife Conflict Management" promoting this approach. A more preventative approach is also adopted in China, where local governments must prevent and control the harm caused by wildlife so as to guarantee the safety of human beings and livestock and ensure agricultural and forestry production (Wildlife Protection Law, article 29). Along similar lines, authorities are called upon to take measures to prevent or reduce human-wildlife conflicts. In Liberia, in the case of protected animals, authorities must take measures to prevent such animals from causing damage to private property, "encourage and cooperate with property owners to prevent the entry of such animals" and compensate damage, unless the property owner has not complied with the obligation to fence or protect the land (Wildlife and National Parks Act, article 40). In Central African Republic, the wildlife service must promote methods to prevent damaging of crops or livestock by wild animals (Wildlife Ordinance, article 94).

In France, the concept of "**agro-forest-wildlife balance**" is used to prevent and address human-wildlife conflicts, specifically in relation to competing land uses. The concept seeks to ensure compatibility of long-term presence of wildlife with the durability and profitability of agricultural and forestry activities (Environmental Code, article L425-4). Such balance is taken into account in the elaboration of the departmental wildlife management schemes and hunting plans. In case of disruption or threat to the agro-forest-wildlife balance, the prefect can suspend the application of hunting plans by specifying the characteristics of the animals that can be killed, so as to facilitate species repopulation to a level that is compatible with the agro-forest-wildlife balance and in line with the objectives of the hunting plan

(article L425-10). On the other hand, if the beneficiary of the hunting plan does not take the minimum number of animals indicated in the plan, they are considered responsible for damage to forests caused by game. In the US, for the management and prevention of damage, the federal Department of Agriculture has a Wildlife Services Office whose self-described aim is "to resolve wildlife conflicts and create a balance that allows people and wildlife to coexist peacefully".¹⁰³ However, the department has legal authority to take "any action necessary" (7 USC 426) regarding injurious wildlife.

Overall, one way in which legal provisions on human-wildlife conflicts could be improved would be to implement some **consultation** over the adoption of relevant measures, focusing on the modification of rules to actual protection needs and the support of the people for any necessary restrictions. Basing applicable rules on an understanding and agreement with people who are mostly concerned by human-wildlife conflicts would be another tool for empowering the poor, which would also have the likely beneficial effect of an overall improvement of compliance with the law.

Box 5-6: Legal options to address human-wildlife conflicts

- Limit killing of problem animals only to cases in which no other solution is viable, and/or provide stricter rules for killing in defence of property of protected species;
- require any individual to report cases of killings of problem animals, if this is expressly allowed by legislation, or by authorities on a case-by-case basis, and for the administration to set up a system to collect data in this respect;
- support the development of preventive measures to address human-wildlife conflicts, such as:
 - agreement on land use planning, preferably as part of larger land-use planning exercises, with the goal of preventing conflicting land uses and incidents of wildlife attacks;
 - cooperative surveillance arrangements;
 - requirements for the administration to monitor the implementation of measures adopted in relation to human-wildlife conflicts;
- inform people of opportunities to participate in meetings to devise strategies for human-wildlife conflicts, providing available data;

¹⁰³ See www.aphis.usda.gov.

- where feasible, create requirements to have recourse to mutual or private insurance schemes;
- provide for "neutral" services in case of damage, such as independent expert evaluation of the cause and extent of the damage, mediation of compensation claims, or prompt administrative arbitration of claims;
- where possible, make compensation available but conditional upon, e.g., fencing in certain ways, cultivation of certain crops, grazing in certain areas, use of guard animals, prompt harvesting of ripe crops, allowing the game managers to install deterrent measures. Transparency in allocating compensation should be ensured – for example simply by requiring the posting of requests and grants;
- setting up systems that make it more likely that funds are available to pay damages. These could include requiring concession holders to obtain insurance against liabilities or setting up some sort of wildlife damage fund supported by the national budget, by money set aside from concession income, by money from hunting licensing fees, or by separate annual payments from hunters or concession holders;
- give guidance on how damage caused by game or hunting activities should be measured and who should decide the amount of compensation due by:
 - declaring a minimum level of damage below which there is no compensation;
 - requiring proof that the game manager was at fault or that the injured person took reasonable steps to avoid or minimise the damage;
 - indicating how to determine whether damage outside hunting areas is compensable;
 - making clear whether the responsibility for paying damages rests with the concession holder, the central authority, or some other person.

6. SUSTAINABLE USE

The law can play a fundamental role in ensuring that wildlife use is sustainable. Besides requiring use to be consistent with management plans (see chapter 3 above), a government can employ several legal tools to promote sustainability. These tools may specifically concern hunting, recreation, traditional and scientific use of wildlife, as well as trade. They include administrative instruments (quotas, licences/permits and

concessions) or contractual arrangements (agreements) to be adapted on a case-by-case basis, as well as general provisions on the regulation of the quantity, time and methods for specific uses.

Sustainable use of wildlife may generate significant revenues at the local level, possibly contributing to conservation efforts and to poverty alleviation. This chapter will focus specifically on legal tools to regulate, and encourage as appropriate, various uses of wildlife, including: eco-tourism, breeding and ranching, trade and hunting. It will also explore cross-cutting issues such as benefit-sharing, community-based wildlife use and the role of the private sector in sustainable wildlife use.

6.1 Defining and regulating different types of wildlife use

To plan for sustainable use, lawmakers and planners must know what the uses are likely to be. Regulatory schemes commonly set out the categories of use, including hunting (e.g. traditional, recreational and scientific) and non-hunting uses (such as trade, eco-tourism, game ranching and breeding). According to the laws on wildlife of Kyrgyzstan and Tajikistan, for instance, the following type of wildlife uses are listed in legislation: hunting; capture of fauna for purposes other than hunting; use of fauna for scientific, cultural, educational, recreational and aesthetic purposes; capture of fauna for breeding in captivity or semi-captivity conditions; and use of beneficial properties of animal products. The most frequent problem is, however, the failure of the law in linking the defined types of use, the procedural mechanisms that implement them and the associated management restrictions.

It is in effect not enough to simply define use types without also establishing a **specialized management regime** for each. In other words, consumptive wildlife use type should result in specific limits and controls targeting a specific area and particular individuals belonging to an identified group. For non-consumptive uses, the law should consider, on the one hand, incentives (or other encouragements) and, on the other, conservation concerns (to avoid potential adverse impacts on other species or the environment).

Different wildlife uses may be linked with different **authorization requirements**. Congo grants different permits for sport hunting, scientific hunting, wild animal keeping, village hunting, and wildlife collection (authorizing the keeping of parts of animals that are not wholly protected);

and licences for commercial capture, game farming and game ranching (Wildlife Law, articles 41–43). Gabon requires permits for small-scale and large-scale hunting; scientific hunting and scientific capture; commercial capture for live animals (only for nationals for commercial, tourist or breeding purposes); and for photographic safaris (*licence de chasse d'images*), to film or take photographs (required for professionals, for commercial purposes). Professional filming of protected areas is also subject to authorization and payment of a fee (Forestry Code, articles 177–178).

In Angola, different licence types are envisaged in the draft wildlife law for recreational hunting, tourist hunting, hunting of potentially dangerous species or specialized hunting (including the operation of hunting safaris and ecotourism). The draft hunting regulations specify that recreational hunting can target small game only when this does not affect the subsistence needs of local populations. Legislation may also distinguish different uses based on the type of wildlife that is the object of such use, rather than the purpose of the use. In Botswana, the Wildlife Conservation and National Parks Act makes a distinction between "bird licences", "single game licences", "small game licences" and "special game licences" (sections 26–38), the latter of which may be issued to citizens "who are principally dependent on hunting and gathering veld produce for their food" (section 30).

A few countries establish **general bans** on certain types of wildlife use. In Costa Rica, extractive uses of wildlife, other than those included in the Regulations for Hunting outside Protected Areas and Fishing in Protected Areas, are only allowed as a result of authorized captive breeding operations (Wildlife Law, articles 1 and 14). Bolivia imposed a general ban on all uses of wildlife, except those of a scientific nature, in 1990; at present, it allows commercial wildlife use only for specific species with approved management plans. Such use of wildlife is thus subject to a permit from national authorities, issued under a ministerial resolution, based on studies and inventories (Decree on sustainable wildlife management plans, article 1). Such resolutions specify conditions and requirements for wildlife use and determine two-year quotas. Non-extractive uses of wildlife are outside the scope of the general ban on wildlife taking, and are, therefore allowed in both private and public lands. Similarly, in Brazil, wildlife may not be used for extractive purposes: both commercial hunting and trade in wildlife products are expressly forbidden. The federal government may, however, authorize hunting in regions where it is a traditional activity (e.g. subsistence hunting), or in regions where animals are considered harmful to agriculture

or public health (Fauna Law, articles 1–3). Brazil adopted this broad pattern with an eye towards regulatory efficiency: it expects that general prohibitions with a handful of exceptions will provide the benefits of simpler and less costly enforcement. However, such an approach, by placing severe restrictions on wildlife use, generates an **indirect incentive for land-use change**. Private land owners perceive this as a reason to choose other uses of land that are less strictly regulated, thus favouring the transformation, for example, of wild pastures or forests into agricultural lands – with the accompanying detriment to biodiversity.

Specific bans may be imposed to implement international obligations or to address in a precautionary way an internal situation. General bans, however, may have opposite effects to those sought and possible derogations should be carefully drafted.

Box 6-1: Legal options for defining wildlife use

- Define different uses of wildlife and specific management regimes for each;
- where the law considers the use of different *hunting* types:
 - define each type;
 - attach specific procedures for the determination of who may hunt for which purposes;
 - require the appropriate government agency to establish limits and controls for each type of hunting.
- include non-consumptive uses of wildlife, providing minimum requirements to ensure that such use does not negatively affect biodiversity or the environment (such as wildlife disturbance avoidance, cautions for eco-tourism, general obligation for operators to monitor and prevent negative impacts on the environment). Specific permitting requirements for operators involved in facilitating third parties' non-consumptive uses should also be provided for.

6.2 Eco-tourism

The Convention on Biological Diversity provides guidance relevant for legislators regulating eco-tourism related to wildlife, highlighting the importance of management planning, impact assessment, stakeholder involvement and benefit-sharing. It further calls for creating incentives for sustainable tourism development, supporting private sector voluntary initiatives consistent with the CBD principles and guidelines, and limiting tourism development or activities in areas where conservation actions are to take place. In addition, IUCN underlines the need to ensure that interactions with wildlife must not adversely affect the viability of wild populations. Any disturbance of natural ecosystems should be minimized, mitigated or repaired, and there should be a compensatory contribution to conservation management (chapter 1).

Eco-tourism is a fairly recent area of regulation. There are basically no legal requirements on eco-tourism in Central Asia. In other regions, however, legislation assigns specific responsibilities for the **promotion** of eco-tourism to certain institutions, and may couple this task with the duty to consult the public or local authorities. In Congo, the relevant minister is called upon to adopt promotional measures (such as fiscal incentives and training) in consultation with concerned populations (2008 Wildlife Law, article 69). The Constitution of Lao PDR provides that the state and society promote, develop and open up the country to ecotourism (article 30).

In some instances, the main wildlife legislation may provide specific requirements for **licenses** for eco-tourism activities, sometimes in conjunction with hunting tourism activities. In Zambia, a photographic tour operator licence is necessary (Tourism Act, section 52). In Mozambique, hunting guides, who are authorized by the National Directorate of Protected Areas, upon advice from the hunters' associations, may conduct hunting and photographic safaris (Wildlife Regulation, article 51). In Zimbabwe, conducting photographic safaris for profit within any national park, sanctuary, safari area, forest land or within any communal land, requires a professional hunter's licence, learner professional hunter's licence or professional guide's licence (Parks and Wildlife Act, sections 65–69).

In Mauritius, the Tourism Authority licenses nature-based tourism activities or adventure-related tourism activities; however, there are no specific provisions governing wildlife watching in the Tourism Authority Act.

Similarly, in Congo public or private operators can organise wildlife watching; access to protected areas and wildlife-watching by visitors is subject to a permit or licence, upon payment of a fee. Licences may also be necessary for professional taking of photographs or filming of wildlife but are not subject to any fees (2008 Wildlife Law, articles 67–69).

Legislation may subject eco-tourism activities to **management planning** requirements. Ecuador requires management plans and monitoring of tourism's impacts on protected areas (Special Regulation on Tourism in Protected Areas, article 15). In Angola, draft wildlife legislation states that eco-tourism in protected areas should be carried out according to a yearly management plan. Guatemala has developed guidelines for non-extractive uses of wildlife in protected areas, including a Code of Conduct regarding Bird Watching and Eco-Tourism in Protected Areas (2000). In China, within protected areas tourist activities in the experimental zone must follow the activity programme established by the administrative agency of the nature reserve and approved by the administrative departments of nature reserves at the provincial level, plus at the State Council level for national nature reserves (Wildlife Protection Law, article 29).

Legal provisions requiring authorizations for organizing wildlife-watching activities seldom provide for certain conditions or limitations, although they sometimes require the use of professional **guides**. In Sabah (Malaysia), wildlife tour operators in any protected area are subject to a permit, and they must provide periodic reports on any sign of unlawful human activity, wounded animals or animal remains discovered (Sabah Enactment, article 76).

Burkina Faso distinguishes between hunting guides and wildlife-watching tourist guides (Decree No. 98-305/PRESS/PM/MEE/MTT, article 19). Both types of guides must hold a professional certificate (article 21). While there are no particular requirements to obtain a certificate for wildlife-watching guides, the certificate for hunting guides is issued upon an examination organized by the ministry responsible for wildlife, testing their knowledge of wildlife legislation, species identification and ability to handle weapons (Forest Code, article 135; and Order No. 2004-017/MECV, article 2). Hunting guides are responsible for the safety of their clients and are responsible for damage caused by them. They are also held jointly responsible for violations committed by clients, unless they prove that they had done everything possible to prevent the offence (Forest Code, article 137).

A combination of approaches can be found in Bolivia, where the regulation on protected areas also sets out guidelines for tourism operations (Protected Areas General Regulation, articles 99–100), requiring operations to take place in areas that have a management plan, in accordance with the applicable zoning restrictions of the plan, and subject to a fee (article 104). In addition, other non-extractive uses must be awarded a concession upon satisfaction of several requisites including a positive assessment by the relevant national or departmental authority in the protected area; confirmation that activities conform to the protected area's management plan and zoning provisions; confirmation that the uses proposed are consistent with the area's objective; and an environmental licence (article 142). A regulation on tourism operations in protected areas further details the national or departmental authorities in charge of issuing tourism operation licences and determining fees for such operations. It assigns responsibilities for control and day-to-day management to each protected area director. The regulation determines tasks to be performed by the protected area management committees, which, for example, must promote tourism projects with direct benefits that engage local communities, and help in identifying violations to existing regulations. Furthermore, the regulation subjects all tourism activities in protected areas to a prior environmental impact assessment. It defines tourism activities to include, for instance, photography and bird watching, noting the approval of tourism licences may include restrictions or limitations to specific activities. Detailed procedures for the issuance of tourism licences are described, along with requirements for development of infrastructure (building hostels, etc.) and rights and obligations of tourists in protected areas.

The absence of specific qualification requirements to obtain licences makes a licensing system useful only to keep track of eco-tourism operators and to collect applicable fees, but may have limited effects in ensuring environmental sustainability and social benefits. The absence of specific rules also causes lack of transparency and probably lack of confidence in the overall system by disadvantaged people – a typical hindrance to legal empowerment of the poor. It is thus advisable to set out specific criteria for the issuance of licences or concessions for wildlife watching and other types of ecotourism, rather than completely relying on the discretion of the administration. However, excessive requirements can act as disincentives to benign use of the resource – especially where bureaucratic procedures are burdensome and licences cannot be easily obtained – so the law should avoid over-regulation. Subsidiary legislation can rather easily specify essential requirements for operators and guides and can include separate

specifications for local guides as opposed to larger tourist companies. In legislation concerning wildlife management by private parties, provisions can sometimes be found regarding social obligations and sharing of benefits with concerned local people. These provisions could be more widely adopted and expanded.

Even more significant are legal provisions explicitly addressing the question of social benefits. One possibility is to provide a legal basis for **community-based eco-tourism** specifically promoting the involvement of local people and thus significantly contributing to legal empowerment of the poor. Rural communities are usually in a good position to undertake eco-tourism initiatives and legislation should facilitate their involvement and where possible grant exemptions from general rules (waiving of fees for community initiatives, etc.). At the same time, minimum requirements to ensure the environmental sustainability of eco-tourism activities should be set out (in legislation, or guidelines subject to strict monitoring). One example is provided by Kenya, where community forestry initiatives may include wildlife-based ecotourism: community forestry concessions may in fact lead to management agreements to confer various forest user rights, including rights to develop ecotourism and recreational activities (Forest Act, article 47). In Viet nam, the management boards of national parks or natural reserves may lease forest areas to organizations and individuals for eco-tourism development. The management boards must publicise such schemes among local communities, so that local communities can participate. The leases may not exceed 50 years' duration (2007 Regulation on Management of Ecotourism Activities in National Parks and Nature Reserves, article 6(2)). EIA reports are required for eco-tourism units.

Botswana provides another legal tool to involve local communities in eco-tourism. A management plan for national parks and game reserves may designate an area as a "community use zone", which may only be used for commercial tourism activities but not for hunting (National Parks and Game Reserve Regulations). In the Philippines, the law allows tourism activities within protected areas in the framework of special use agreements. The law on protected areas acknowledges that their effective management should encourage cooperation between and among stakeholders to manage and develop the appropriate zones of protected areas. This mechanism aims to provide access and economic opportunities to indigenous peoples, tenured migrant communities and other stakeholders, thus reducing poverty; promoting sustainable development and biodiversity conservation; increasing

cooperation with stakeholders; guiding development in zones in accordance with their management objectives; and earning revenues to support management. The law describes the procedure for the processing and issuance of these agreements in detail, including tight deadlines for decision-making. Grounds for cancellation of agreements include violation or non-compliance with any of its terms and conditions, abandonment of the area or when national interest so requires (2004 Revised Guidelines on the Establishment and Management of Community-based Programmes in Protected Areas).

Alternatively, eco-tourism can be regulated as part of ranching and breeding activities (see section 6.3 below). In Angola, for instance, "hunting farms" are delimited areas of public rural land or community land where the farm manager may authorize photographic safaris and ecotourism.

The law may also set more general social goals in regulating wildlife-related tourism, as well as assigning specific obligations to support community efforts in this regard. In Viet nam, for instance, state policies on the conservation and sustainable use of biodiversity should support the development of eco-tourism "in association with hunger eradication and poverty alleviation, ensuring stable livelihood for households and individuals lawfully living in conservation zones." Eco-tourism activities in national parks and nature reserves must not affect the natural ecosystem and landscape, the life of animals or the cultural identity of local communities. Organizations and individuals carrying out eco-tourism activities must give priority to local communities' participation in the activities, creating employment and gradual raising local people's living conditions. Local communities may participate in and enjoy lawful benefits from eco-tourism activities and at the same time protect natural resources and preserve indigenous culture. The law supports communities' efforts to invest in eco-tourism development, restore and develop forms of folklore and traditional crafts, and produce local goods for eco-tourists, contributing to improving local people's life. Specifically, the law calls for **biodiversity conservation facilities** for conservation, research and eco-tourism purposes, including facilities rearing endangered, precious and rare species and wildlife rescue centres (Biodiversity Law, articles 42–44).

Box 6-2: Legal options for supporting sustainable eco-tourism

- Allocate clear responsibilities among relevant authorities for monitoring and promoting eco-tourism;
- require the adoption of national strategies or master plans for sustainable tourism development, which should be continuously reviewed, thus allowing for a system of adaptive management based on environmental impact assessment, impact management and the precautionary approach;
- ensure the sustainable use of biodiversity and wide stakeholder involvement in planning and implementation of both existing and new tourism operations, including benefit-sharing conditions;
- set up licensing processes for tourism development and activities, requiring environmental assessment, including assessment of cumulative impacts and effects on biodiversity, for proposed major tourism developments. The licensing system should be useful for keeping track of eco-tourism operators, but avoid excessive bureaucratic procedures;
- provide separate specifications for local guides as opposed to larger tourist companies, with a view to supporting local entrepreneurship;
- establish specific mechanisms for community-based wildlife-watching tourism, supported by an obligation for authorities to provide technical advice and capacity-building;
- create social obligations and benefit-sharing provisions for private eco-tourism operators, or incentives for private sector voluntary initiatives consistent with environmental legislation and that involve and/or benefit local and indigenous communities.

Source: inspired by Guidelines on Biodiversity and Tourism Development (CBD Decision VII/14).

6.3 Ranching and breeding

Chapter 1 highlighted guidance from CITES on breeding and ranching. In particular, national legislators should limit practices detrimental to the survival of species in the wild, prevent deleterious in-breeding, and restrict introduction of new specimens from the wild into the captive breeding stock. (The law can allow limited introduction of new specimens under

unusual circumstances, for instance, as a humane and constructive means for the state to handle confiscated animals.) As for ranching, the state should regulate this to ensure that it primarily benefits the conservation of local wildlife populations. Legislation should further require the identification and documentation of all products of each operation, the development of harvest-level controls and monitoring mechanisms, as well as safeguards to ensure that adequate numbers of animals are returned to the wild if necessary. In addition, the law should require assessments of the likelihood of biological and economic success of ranching operations and should set standards for humane treatment of the animals. Animal health issues should also be addressed (see section 5.5 above).

Ranching and breeding of wild animals are unevenly addressed in national legislation. Laws usually expressly grant ownership of animals bred to the breeder. Granting rights to own and dispose of animals resulting from ranching and breeding are sometimes included to encourage an activity that may contribute to endangered wildlife repopulation. In other instances, the law places conditions on breeding to make sure it helps the wild.

There may also be specific institutional arrangements in place to deal with ranching and breeding. In India, for instance, a **specialized administrative entity** is charged with specific breeding-related tasks. A Central Zoo Authority identifies endangered animal species for captive breeding and coordinates the exchange of animals for breeding purposes, ensuring maintenance of data and promoting coordinated research on captive breeding efforts (Wildlife Protection Act, article 38A and C).

When ranching and breeding are addressed in national legislation, they are usually subject to an authorization system. Burkina Faso, for instance, defines ranching as an activity involving wildlife production and exploitation in an open area, which must not be fenced, aiming at developing wild animals. It must be authorized by the relevant minister, and is subject to regular surveys by the local wildlife service or by the developer, to ensure rational utilization. Ranching concessions also require a ministerial authorization. A technical agreement (*cahier de charges*) must specify the activities that may be carried out in combination with ranching. Wildlife breeding, in turn, is defined as the production of wild animals, whether kept in captivity or semi-freedom, for commercial purposes. The law allows it without conditions on private land; otherwise it requires a ministerial authorization. Animals bred under this arrangement are the property of the

breeder, who is responsible for damage caused by animals (Forest Code, articles 142–151 and 161–163).

In New Zealand, permits or licenses for keeping specified wild animals in captivity, including farming for the purpose of sale or breeding or operating a safari park, cannot be issued without prior consultations with the relevant regional council, and without ensuring that the land is within the "feral range" of the species, is not unsuitable because of its susceptibility to erosion and will be adequately equipped with effective fences (Wild Animal Control Act, section 12).

In China, breeding wildlife that is under special state protection is subject to a licence, which cannot be transferred. Entities and individuals may sell such wildlife or its products to purchasing units designated by the government, by presenting their domestication and breeding licenses and in accordance with the relevant regulations. The competent provincial department proposes such units in consultation with the parties concerned. Approval is issued by the people's government at the same level or the department authorized thereby. An application, with the documents of approval attached, must be made to the administrative authorities for industry and commerce for record and registration (Wildlife Protection Law, articles 22–25).

Mali uses regulations to specify conditions for breeding for commercial purposes. A licence, in any case, is required to breed or ranch wild animals for commercial purposes. This licence lasts one year – an unusually brief duration for an activity that may involve some investment and medium- or long-term planning (Decree No. 97-052/P-RM, article 34). In Congo, legislation differentiates between game farming licences for raising non-protected animals in a controlled environment for trading purposes, and game ranching licences for the repopulation of non-wholly-protected animals in a protected or managed area, with a view to permitting their exploitation as food or for other purposes (2008 Wildlife Law, articles 53–54).

As can be seen from the series of examples listed above, there is quite a variety of ways in which ranching and breeding authorization systems can be put in place. A common shortcoming, however, is the lack of detailed provisions on the procedure to obtain the authorization, or provisions that ensure that the procedure is fair and transparent.

In some instances, ranching and breeding activities are subject to **management planning requirements**. This is the case in Guatemala, where legislation requires a management plan for captive breeding operations (Protected Area Regulation, article 62). Along similar lines, in Greece, in areas where there is a particular breeding interest due to the number of animals and the possibility of breeding development, plans for breeding quantity and quality controls must be developed. Through a decision, the Ministry of Agriculture coordinates breeding and defines the conditions and regulations for the running of the breeding sites (Law n. 1845/1989 "Development and exploitation of agricultural research and technology – Forestry protection and other provisions", article 32). In Brazil, management planning specifically targets captive breeding operations. In addition, Brazil is implementing a new information system – "*Sisfauna*" – that will allow the **traceability** of all legal wildlife products from their production in breeding centres to their export. Breeding centres require an authorization by the National Institute of Environment and Natural Resources to operate, and must record all their activities related to movements of specimens in the "*Sisfauna*" information system via the internet. This is quite significant, as allowing people to trade captive-bred specimens complicates enforcing prohibitions on trade of wild specimens. Regulators must have a way to track or identify captive-bred stock in trade, so that they can continue to prevent trade that could deplete wild populations.

In Malawi, the National Parks and Wildlife (Wildlife Ranching) Regulations, 1994, lay down **specific requirements** and conditions for wildlife ranching. A permit, whose form is set out, is always required and harvesting requires the approval of the administration. Other provisions regulate inspection, release into the wild, and destruction of escaping animals, record keeping and prohibition to kill with weapons other than firearms. In Mozambique, wildlife ranching may be exercised in duly identified areas, in observance of a management plan (Forest and Wildlife Law, article 20). Wildlife ranching operators should prepare an inventory of existing wildlife resources, and install safety facilities for dangerous animals (Hunting Regulation, article 84). Ranching facilities will be inspected regularly by the provincial services for forest and wildlife management (article 85).

In Viet nam, responsibility to manage the breeding and rearing of protected species rests with forest management offices of provinces or centrally-run cities, or with the Ministry of Agriculture and Rural Development for localities where no such offices exist. Breeding and rearing farms must satisfy

conditions, including registration, suitable construction of cages and farms, ensuring safety for humans and environmental sanitation, meeting the requirements of management and techniques of breeding, rearing and tending the reared species and preventing diseases and epidemics. Breeding of protected species must comply with plans approved by the Ministry of Agriculture (Biodiversity Law, articles 42–44). In Sabah (Malaysia), wild animal farming requires a permit, subject to conditions as to constructions, sanitary conditions, and measures for the prevention of escape and of animal diseases (Sabah Enactment, article 78).

The legislation of Botswana on establishing a game reserve allows the authority to withdraw permission for breeding if land and wildlife management practices are unsatisfactory (1992 Declaration of Private Game Reserve Order). The generality of this statement, and therefore the wide discretion left to the administration, offers an example of how loose standards can undermine the security of a useful arrangement, probably resulting in lack of trust in this type of arrangement altogether. To prevent similar consequences, it would be preferable to require the administration and the person interested in ranching or breeding to enter into a specific agreement, setting out conditions to be applied. Withdrawal of authorizations would then be subject to more specific criteria rather than discretionary evaluation.

In the Philippines, the wildlife farm culture permit is subject to an **environmental impact study**. The quantity of individuals per species to be collected must not exceed the national quota, determined on the basis of the best scientific and/or commercial and other significant data available after conducting a review of the status of the species (Wildlife Act, sections 17 and 21; Wildlife Act Implementing Rules and Regulations, rule 7.1). EIA requirements may be useful for planned large-scale activities and when particularly endangered species or fragile ecosystems may be involved.

In Georgia, Government Regulations n. 132 provides for specific **duties for the holder** of a license for "game husbandry" in relation to forest management, such as preparing a forest management plan and obtaining an eco-auditor's certificate issued by a relevant organization accredited in any member state of the Organization for Economic Cooperation and Development (OECD); presenting every year a report on the implementation of activities stipulated in the forest management plan and an inventory of wildlife; observing the defined wildlife quotas; ensuring wildlife

protection and conservation; preventing deterioration of habitat; deterring violations of the law within the territory defined in the license; and informing relevant agencies about such violations. In the event of wildlife habitat deterioration and other threats to wildlife, the license holder is to immediately cease wildlife use and take measures to avert any negative impact on wild animals and their habitat. In Turkey, breeders are obliged to establish and maintain a healthy environment for animals, to keep a breeding log, to subject to a health examination animals to be released into the environment, and to handle a disease outbreak in breeding sites (Regulation on Keeping and Trading of Game and Wild Animals and of their Products).

Few examples of more detailed **social obligations** related to breeding and ranching can also be singled out. According to Angola's draft wildlife law, the developer is requested to formulate a management and exploitation plan, including issues of infrastructure, control and fire prevention, and take into account the needs of neighbouring communities related to security, access to food and economic development. An environmental impact assessment may also be required for large-scale operations. Furthermore, the authorization process for ranching activities explicitly includes local communities, who are involved in the evaluation of breeding operation proposals. Conditions applicable to authorized ranching activities, such as an obligatory preference for local recruitment among communities, may significantly contribute to the empowerment of the poor. Certain ranching activities have also been specifically regulated to benefit local communities. For instance, the *Quelônios da Amazônia* project in Brazil allows the gathering of 10–20 percent of turtles' offspring within the project's areas. The young turtles go to commercial breeding centres managed by local communities, who receive the total of the income generated by these operations.¹⁰⁴

Overall, ranching and breeding may provide a significant contribution to environmental sustainability and rural livelihoods and should for this reason be encouraged, to the extent that they do not lead to unsustainable practices or negative impact on adjacent ecosystems. Legislation should thus avoid **unnecessary rules**, while at the same time establishing some minimum criteria for environmental and social sustainability. Limitations (subjecting ranching and breeding activities to authorizations or management planning requirements) should thus not discourage potential investors by setting out limits to the duration of licences that are incompatible with medium- or

¹⁰⁴ See www.icmbio.gov.br.

long-term planning and investments. Minimum legal rules should address definitions, property issues, requirements for the sustainability of the activity and their legal consequences. Finally, legislation should also provide incentives for community-based arrangements, encouraging sustainable breeding and ranching activities in ways that contribute to the support of rural livelihoods.

To maximize the environmental and social benefits and minimize related risks of ranching and breeding, the law should regulate them more systematically, but not necessarily more strictly. Legislation could require early identification of likely impacts, at the stage of planning, for large-scale activities. The law can place conditions on these operations to minimise or mitigate environmental harm and share benefits with the local community. To assure flexibility, the law can describe the general aim of the conditions and direct the implementing agency to include them in licenses, concessions, or technical agreements.

To make sure that the regulators understand potential and actual impacts, the law should require consultations with potentially affected stakeholders during planning and ongoing monitoring of impacts after the activity is authorized. In Costa Rica, for example, once approved, captive breeding projects must be publicised in newspapers, allowing a week for the presentation of objections (Wildlife Regulation, article 45). Public participation at an earlier stage would be even more beneficial.

Box 6-3: Legal options for ensuring sustainable ranching and breeding

- Put in place minimum environmental safeguards, such as ensuring that breeding does not lead to practices that are detrimental to the survival of species in the wild; prevent deleterious in-breeding; and regulate the exceptional additions of new specimens from the wild to the breeding stock (for instance, to dispose of confiscated animals);
- regulate ranching to ensure that it primarily benefits the conservation of local wildlife populations, as well as to ensure health controlled environments and human conditions for ranching and breeding;

- set requirements for the identification and documentation of all products of each operation, the development of inventories, harvest-level controls and monitoring mechanisms, as well as safeguards to ensure that adequate numbers of animals are returned to the wild if necessary. Requirements should also ensure the humane treatment of animals;
- require the development of management plans and require the conduct of EIA if the planned activities are large-scale or may involve endangered species or fragile ecosystems;
- mandate consideration of food security and traditional practices of neighbouring communities in the establishment of ranching or breeding facilities and related management planning, possibly with the option of involving members of these communities in ranching and breeding activities;
- provide for financial and other incentives (such as exemptions from general rules applicable to the utilization of wild animals) for operations that significantly contribute to environmental sustainability and rural livelihoods;
- require the conclusion of agreements with the administration for community-based ranching and breeding operations, so as to specify applicable conditions and clearly allocate responsibility for the provision of technical and possibly financial support to communities.

Source: inspired by CITES Resolutions Conf. 11.16 and 4.15.

6.4 Wildlife trade

Providing a secure environment for the conservation of endangered species and reducing the potential for illegal hunting includes the elimination of market opportunities for illegal trade and perverse incentives from international and national trade. In virtually all countries, a flourishing domestic and international market for wildlife products targets several species, some of which are internationally recognised as endangered or threatened with extinction. Most laws apply few, if any, controls on domestic wildlife trade and only limited control on international trade, reducing the chances that a wildlife conservation and sustainable use regime will be successful.

Laws must instead regulate both international and national trade to maximize enforcement potential and ensure that neither trade type undermines conservation efforts. According to CITES (chapter 1), states should at a minimum adopt legislation that:

- (i) designates at least one management authority and one scientific authority;
- (ii) prohibits trade in specimens in violation of the convention;
- (iii) penalizes such trade; and
- (iv) calls for the confiscation of specimens illegally traded or possessed.

To provide just a few examples at the national level, in Guyana, the Species Protection Regulations 1999 govern international wildlife trade in enumerated wildlife species through a system of permits and licences. In deciding whether to issue an export or import permit, the management authority, upon the advice of the scientific authority, must be satisfied that, among other conditions, the import or export is in the best interest of Guyana and is not in contravention of any treaties. In the case of importation, the import cannot be for purposes that are detrimental to the survival of the species (article 14).

In Argentina, the Secretary of Environment and Sustainable Development, through the national Direction of Flora and Fauna, in coordination with relevant provinces, adopts management plans for CITES-listed species and other species of special concern, including through the establishment of maximum extraction quotas and other measures (Wildlife Decree, articles 8–9). The Direction of Flora and Fauna also regularly adopts a list of endangered species for which inter-provincial and international trade is forbidden (Resolution on Hunting and Trade Ban).

China prohibits all trade in rhino horn or tiger bone, as rhinos and tigers are CITES-listed species Annex I (1993 Circular of the State Council on banning the trade of rhinoceros horn and tiger bone). Accordingly, China has abolished the medicinal standards for rhino horn and tiger bone, and the animal parts should not be used to produce medicine (article 3). Medicinal research for substitutes is encouraged (article 4).

In the US, the Lacey Act as amended (16 USC 3371–3378) prohibits commerce in illegally obtained wildlife. The illegal action that taints the wildlife can be in any jurisdiction, inside or outside the US, and the wildlife does not have to be rare or endangered. For example, if a person captures a

parrot without a license or without paying the local taxes on it, or if a person steals a parrot from a legal collector, and that parrot is shipped to the United States, anyone transporting or receiving that parrot is in violation of the Lacey Act. The commerce may be international trade, but it can also be interstate commerce within the US. The basic sanctions are civil fines and forfeiture of the wildlife, however if the violator knows the wildlife was obtained illegally, criminal sanctions apply, possibly including forfeiture of the violator's vehicles or equipment used to transport the wildlife. The act allows the government to issue rewards (from fines collected) to people who assist it in catching violators.

Wildlife trade may contribute significantly to poverty reduction and its regulation should ensure environmental sustainability through rules that can be reasonably complied with, so as not to push the poor outside the realm of law. Legal provisions may also be devised so as to ensure that local communities or nationals benefit from wildlife trade. In the Philippines, only Filipino citizens, or corporations, partnerships, cooperatives or associations owned at 60 percent of their capital by Filipinos, are allowed to collect non-threatened economically important species for direct trade purposes, upon the issuance of a wildlife special use permit (2004 Wildlife Act Implementing Rules and Regulations, rule 18.2).

Once again, consultations with relevant stakeholders to better understand their needs, share with them scientific knowledge related to the status of species subject to trade, and take into consideration traditional knowledge may lead to realistic, environmentally sound and pro-poor legal provisions on wildlife trade. In Australia: the law requires public consultation before the approval of a wildlife trade operation or a wildlife trade management plan, while consultation with concerned state and territory agencies is required before approval of a wildlife trade management plan. Certain specimens prescribed by the minister owned by or used by traditional inhabitants in traditional activities are exempted (Environmental Protection and Biodiversity Conservation Act).

Box 6-4: Legal options for regulating trade

- Establish in a participatory manner certain requirements to national trade that apply to international trade: e.g.,
 - requiring special permits for the transportation, possession, and trade of a wild animal or part by anyone other than the permitted hunter;
 - creating registration requirements and procedures for existing wildlife specimens;
 - setting out additional fines for violation of national trade restrictions;
 - setting trade quotas where applicable;
 - requiring application of confiscation rules and procedures;
- create a legal grace period during which existing wildlife products may be registered to ease implementation;
- avoid creating excessive restrictions that would impede sustainable livelihood activities related to wildlife trade.

6.5 Hunting

Hunting plays an important economic and social role in many countries, where it may be a significant source of food or revenue, or be a popular recreational activity. It may also be tightly linked to traditional, cultural or religious practices. Often hunting plays a predominant role in debates over wildlife management legislation, and four traditional lobbies come into play: farmers, hunters, traders and environmentalists (Cirelli, 2002).

Legislation has traditionally limited hunting activities with a view to ensuring the long-term viability of the activity and the conservation and sustainable use of wildlife. Typical tools include general prohibitions based on quantity of animals that may be taken, limitations in time (open/closed seasons, time of day), area-based limitations (some countries limit hunting to certain areas, whereas others allow hunting to be exercised throughout the national territory including on private land), and limitations regarding hunting methods and weapons. The extent of the effectiveness of these traditional legal tools depends on the use of exceptions allowed by law or practice: often, the law allows the administration to grant exceptions freely, or for specific purposes but without providing adequate means to prevent abuse

(Cirelli, 2002). Ideally, all these specific tools should be applied in the framework of management planning (chapter 3).

The law may distinguish among different types of hunting (see section 6.1 above) according to their purposes – traditional hunting (discussed in detail in section 6.5.7 below), commercial, recreational, trophy, scientific – or according to the target game – small or big game, birds. The law may also treat nationals and foreigners differently.

The following sub-sections will first identify legal tools to ensure environmental sustainability, such as to identify game species, set hunting quotas, define hunting seasons, identify hunting areas, limit hunting methods, and set up transparent and effective procedures for the allocation of hunting rights. It will then focus specifically on aspects that are more related to the empowerment of the poor, such as traditional hunting and hunting tourism.

6.5.1 Accurately identifying game and non-game species

Hunting legislation should specifically identify (using common names and scientific names) not only what can be hunted, but also what cannot. Many hunting regulations, however, use only common names and catchall categories that can result in confusion and possible management gaps. This is especially true for birds, where regulations have used categories such as "waterfowl" or "ducks and geese." In both of these examples, the category includes several species, some of which may be globally threatened and/or listed in a particular country as endangered. A failure to make the necessary distinctions may inadvertently result in authorizing the take of species not intended by the drafters.

To promote consistency, the basic hunting law should cover all hunted species. Often, trophy animals are missing from hunting laws and handled separately through high-level decrees or ministerial orders. The result is a parallel set of legal instruments on hunting that typically does not have the level of detail provided by organic legislation, and can result in confusion and conflicts. In addition, international obligations related to particularly endangered species (such as those deriving from Annex I listing under the Convention on Migratory Species) should be reflected in the identification of game species at national level in countries that are party to the agreement (chapter 1).

Most, if not all, legal instruments analysed for this study contain provisions related to the definition of game species: only a few cases are mentioned here by way of example. Belize and Bangladesh list wild animal species that may be hunted in a schedule to the wildlife law (Wildlife Protection Act and Wildlife Preservation Order, respectively). This may, however, not allow for appropriate adaptive changes, unless the law provides for simplified procedures to amend the list of game. Alternatively, legislation can allocate responsibility for identifying game species. In Japan, the Wildlife Protection and Hunting Law gives the Minister of the Environment the authority to designate game species. In Brazil, the Federal Union annually publishes a list of species that can be subject to extractive practices, detailing seasons and daily quotas for each species (Fauna Law, article 8).

Legislation should also set out the procedural steps in listing and de-listing game species, specifically providing for public participation. Ecuador, for instance, requires that decisions on species for which hunting will be allowed should be based on technical studies and in consultation with hunting and fishing clubs and associations (Biodiversity Regulations, article 82).

In setting out procedures, provisions for institutional coordination may also be needed. In the US, the state governments have the primary role in regulating hunting, and therefore have the primary role in establishing what species hunters may take. However, the federal government plays a significant role concerning endangered species and migratory birds. The federal government may ban taking of specific species or populations. For example, the Endangered Species Act protects certain populations of bears and wolves through listings. The federal Migratory Bird Treaty Act (16 USC 703–712) prohibits the taking of all native birds, but allows the Secretary of the Interior to create exceptions through subsidiary legislation. In practice, the secretary allows hunting of about sixty or seventy species that have a history of being hunted and have population sizes that can stand the pressure of hunting. If a state does not wish a listed bird to be hunted or wishes to place additional restrictions on hunting the species, the state can adopt a more protective law.

Overall, legislation should allocate clear responsibilities for listing and de-listing game species, indicating the procedural steps and institutional coordination requirements to be respected. In addition, listing game species may have impacts on the livelihoods of local and indigenous communities, similarly to what was discussed in the section on listing of protected species

(see chapter 5). Participation requirements in the decisions about listing and de-listing of game species would therefore be appropriate.

Box 6-5-1: Legal options for identifying game species

- Provide specifically for the development of list of species that may be hunted and state that any unlisted species may not be hunted (this type of provision can help close the door on activities authorized by other forms of legislation);
- require inclusion of all common names (if known by different communities under different names) and the scientific name for the species;
- where there is only one common name for different species, require definitions that more specifically identify the species. This may include legal descriptions of where the species occurs and/or drawings of the species incorporated into regulations for distribution;
- provide for a flexible system for listing, allowing for easy amendment of the list in light of changed circumstances, enhanced scientific knowledge or updated international standards. At the same time, certain cautions should be established for de-listing in light of the precautionary approach;
- allow for transparency and public participation in the listing and de-listing of game species;
- ensure compliance with relevant listing in international instruments to which a country is a party.

6.5.2 Providing for an adaptive, science-based determination of hunting quotas

One of the common legal tools for ensuring the sustainability of hunting is setting up a well-structured, flexible and science-based system for setting limits to the quantity of animals to be harvested. Legislation typically does not mandate specific scientific methods, but rather sets a process, together with standards or guidelines that should be followed to ensure that hunting activities conform to the management objectives of the species and area in question. For example, if the objective within a buffer zone is to increase a given species population, quantitative limits should be set at a level that,

according to the best available scientific information, achieve this goal. Quotas should be assessed periodically, and state with specificity the number of animals and, where appropriate, which sex, age or size may be hunted in a given area, per hunter. The same system should also be capable of stating which animals may not be hunted and the reasons for this; i.e. population declines, breeding or migratory route, international or national protection status, etc.

The primary lesson learned in many countries is that often the determination and setting of quotas is less science-based and more demand-driven. In a typical legal format, the law requires political sub-divisions or organizations to submit requests for harvest quotas. A scientific authority later reviews these requests, but generally no scientific study forms the basis either for the request or the review. For trophy animals, the demand-driven nature of the process is even more apparent, where high-level government entities (e.g., a cabinet ministry or minister) have the authority to set quotas for all trophy species at levels greater than those authorized by the scientific authority. Conversely, as highlighted by the Addis Ababa Principles and Guidelines, the law should ensure that quotas are set according to scientific information that is regularly updated through a monitoring system, and should not be based on the economic needs of management planning.¹⁰⁵

To ensure that users understand and respect quantitative limitations to hunting, quota-setting systems should be transparent and participatory, with a view to including consideration of traditional knowledge. In addition, the participation of wildlife users in this type of decision-making may help them better understand the long-term aims of setting quantitative restrictions.

Quota setting for wildlife use is a prominent feature of wildlife legislation in Central Asia and the Caucasus. In Georgia, hunting is subject to licences issued by the Ministry of the Environment, in accordance with quotas established according to regulations elaborated and approved by the same ministry (Law on Environment Protection, article 25; Law on Wildlife, articles 46–48). In Uzbekistan, the State Committee for Nature Protection establishes hunting quotas in coordination with the Academy of Science (Law on Nature Protection, article 9), on the basis of which the Forestry Department issues hunting licences. Also in Norway, the Directorate for

¹⁰⁵ Addis Ababa Principles and Guidelines, practical principle 13, second operational guideline.

Nature Management, which is responsible for permitting hunting of deer species and beaver, fixes the numbers of species that can be hunted, including the sex and age of animals that can be hunted, and issues hunting permits accordingly. Quotas must be calculated according to the population numbers, species habitat and the damage caused by those species (Nature Conservation Act, sections 16–18).

In Mongolia, based on "game resource management" to survey wildlife and plan its management, the central government organization responsible for nature and environment establishes an annual maximum limit for game that may be hunted or trapped for commercial or household purposes for the territory of each province and the capital city. Province and capital city residents' representative assemblies establish similar maximum limits for their respective jurisdictions within the limits set above. The government establishes annual lists and quantities of animals that may be hunted or trapped for special purposes, based on recommendations from the central government organization responsible for nature and environment (Law on Hunting, article 8).

Some US states combine quotas with a system of tagging killed animals (see section 7.4 below), to have better control over the total number of animals harvested. A hunter must buy a tag from the state before hunting. The state sells a limited number of tags, and may limit the number of tags a person can possess (perhaps with an exception for licensed guides). Sometimes, when the potential harvest is small, the state allocates the opportunity to buy a tag by auction or by lottery. Tags are specific to particular species. When the hunter kills the animal, the hunter must attach the proper tag to the carcass. It is an offence to possess an untagged carcass or to be in the field hunting without possessing a tag.

Overall, it is difficult to assess wildlife populations accurately and reliably. However, for the continued viability of the resource, harvest level must reflect actual conditions and the best available scientific data, as well as traditional knowledge. A precautionary approach should be adopted when scientific information is not complete or not updated. The law should therefore encourage decisions based on monitoring and expert consultation, but must retain flexibility, including provisions that allow emergency changes in quotas in response to changing conditions or new information.

Box 6-5-2: Legal options for adaptive determination of hunting quotas

- Clearly delineate an adaptive, science-based process for establishing periodic hunting quotas;
- ensure that quota-setting requirements are established according to a participatory procedure involving key stakeholders, possibly using different policies or procedures for different species or types of land tenure (private or communal land areas or concessions). For migratory species, the process should involve the central government and require coordination across jurisdictional lines, as well as consideration of relevant international obligations;
- ensure institutional coordination and sharing of information if different administrative authorities may be relevant, respecting the responsibilities of central and local authorities;
- link quota setting with management planning and its monitoring system;
- legally require the incorporation of local knowledge in the assessment and determination of harvest levels;
- empower local stakeholders to contribute to wildlife assessments;
- adopt a precautionary approach when available scientific information is incomplete or out of date;
- set out appropriate inter-governmental dispute resolution mechanisms that ensure fair administration of the process;
- allocate emergency powers, reviewable after the fact.

6.5.3 Establishing procedural mechanisms for flexible and adaptive hunting seasons

Based on the concept of adaptive management, the length of seasons may be periodically adjusted with a view to controlling hunting activities that may have negative impacts on declining species. Seasons are thus usually reviewed on an annual basis to assess the impact on wildlife population levels and the ability of the management regime to meet defined population management goals for specific areas.

Experience has shown that hunting seasons typically have three notable problems. First, some hunting seasons are statutorily defined and thus

inherently inflexible. These are unusual in modern legislation, but in some areas statutes still set a long or even permanently open season for hunting with a high cultural value or for hunting of species considered undesirable. For example, the US state of Virginia has a statutory continuous open season for the traditional practice of hunting foxes with dogs (Code of Virginia 29.1-516). The western US state of Oregon has an open season on predators generally (ORS 496.162(3) and chapter 610). Because hunting seasons are defined directly in the legislation, they are unlikely to be changed on an annual basis (or even mid-season) and certainly not with the speed necessary to react in a timely manner to the changing status of a resource. Second, where the authority to alter seasons has been granted, this authority is sometimes arbitrarily limited to a specific time frame, which may not offer enough flexibility for good management. Third, many seasons are directed at species only and not at specific populations.

Regulation of effort is another legal method within the concept of seasons. It limits the amount of time that may be spent in a given area for hunting. The premise is that scarce resources mean greater effort (i.e., more days spent hunting) must be expended to reach quotas. Limiting level of effort can therefore limit the number of animals harvested and serves to automatically react to changing population levels not predictable in advance of the season. It is not, however, an easily recommended provision as it is far more difficult to enforce than generally applicable hunting seasons, which can serve the same purpose (i.e., shorter seasons applicable to all hunters will result in fewer animals harvested). Level of effort is in essence a "season" personal to the hunter and can only be enforced if there are adequate methods for monitoring individual activities. Should this legal tool be adopted, legislation should also delegate authority to the appropriate agency to set levels of effort as needed. This may, however, be difficult to enforce, unless legislation requires hunters to be accompanied by guides and require the guides to keep records on the time spent in the field, or if legislation limits the duration of guided hunting trips.

Managers should enjoy a certain degree of authority to shorten or extend seasons to manage populations and hunting impacts as needed, on the basis of scientific assessments. Ultimately, managing authorities also need the right to institute a "total ban" on hunting. Seasons can and should be defined for specific populations within a specific region. Population-based seasons can better account for the individual management needs in specific areas. This is a particular concern in areas with reduced populations or special

management objectives, such as national parks. Managers may also need to close the seasons in emergencies: to reduce the risk of fires, to stop hunting during unusual weather events that put species at risk, in response to disease outbreaks, etc.

It is worth reiterating that consultation with (potentially) affected individuals and communities is important to ensure due account of local situations and traditional practices, while at the same time facilitate understanding of the needs to take such decisions among stakeholders. Possible impacts on traditional users and local and indigenous communities should specifically be identified and addressed through stakeholder involvement. Ways to prevent or resolve disputes in this regard may also be usefully devised in the legislation. In case of emergencies, however, the consultation or analysis requirements can work against conservation, so the law should provide some emergency powers, reviewable after the fact.

Box 6-5-3: Legal options for determining adaptive hunting seasons

Overall, the law should be explicit in all elements of the procedure and basis for setting seasons, i.e. defining:

- how and when seasons will be defined and updated;
- which organization will be responsible for their setting;
- the basis for establishing such seasons (science-based approach with due account of sustainable traditional practices), including consultations;
- how relevant stakeholders may participate in the decision-making;
- appropriate dispute resolution mechanisms that ensure fair administration of the process;
- emergency powers, reviewable after the fact.

6.5.4 Clearly defining hunting areas

Hunting area regulation may define both areas that are open to hunting and areas closed to it. Alternatively, there may be a presumption that every area is closed to hunting unless it is a declared hunting area, and in some countries a presumption that every area is open to hunting, unless the owner or the government closed it (typical conditions being closeness to homes or

highways). Mozambique, for instance, allows hunting in: multiple-use areas; wildlife farms; clearly demarcated areas, whether fenced or not fenced, in which hunting rights are reserved to holders of land use rights or persons authorized by them, if duly licensed; official hunting areas; areas of state land devoted to recreational hunting, hunting tourism or species protection under concession agreements; buffer zones; and areas of historic-cultural value (Wildlife Regulation, article 46).

Hunting areas are often defined in the law using the form and method of legally describing property boundaries customary in the country, typically in text form. The resource user and law enforcement can benefit from a map consistent with the legal descriptions and available for use in the field. Such a map needs to draw on easily located boundaries like a river or a jurisdictional boundary, or be detailed and very large, otherwise it can be hard to pinpoint the boundary on the ground. An additional written description in those cases can give more certainty. If the map is adopted as part of the law, the law should address the question of which should prevail if by mistake the map and written description conflict.

Further regulation establishes the types, volumes, seasons and species that may be hunted within the hunting area. Closed areas are similarly defined, but remain closed to hunting in any form regardless of the species or season. Closed areas are typically selected for their importance to wildlife as breeding grounds, migratory routes and over-wintering areas, as well as for safety concerns for local communities. Closure results in a "zero-take" management strategy for the area, but is also used to prevent undue disturbance of wildlife during critical times to enhance overall survival rates and increase population levels.

Provisions on closed areas and hunting areas may be confusing. Some countries may use the term "game reserve" for protection purposes, while others may identify with that term areas opened to hunting and others yet may foresee both possibilities. In Bangladesh, the government can establish "game reserves" on public or private land with a view to ensuring protection and repopulation of wildlife. When private game reserves are established, hunting under a special permit may be allowed for a specific number of animals and time period, upon application by the owner (Wildlife Preservation Order, articles 2 and 23). In Turkey, the Ministry of Environment and Forestry may declare "wildlife development areas" that are not on forestlands, and the government may declare these areas in

forestlands (Hunting Law, article 4). These are areas in which wildlife species must be protected, but where hunting activities are allowed in accordance with special hunting plans. Moreover, within wildlife development areas, wildlife may not be damaged, ecosystems may not be destroyed, no constructions may be completed that may create potential threats or damages to the areas and no waste may be disposed of.

Hunting areas may be established on private land. In Namibia, an owner or lessee of a sufficiently large parcel of rural land can acquire rights to the game mammals and birds on the land by installing a suitable fence. Once that happens, the owner or lessee can control who hunts on the property and can sell permission to hunt, although hunting is still subject to government regulation. The owner can also capture and raise game on the land (Nature Conservation Ordinance, sections 29–40). When the government establishes hunting areas on private lands, it raises issues of ownership rights. The law is not clear whether private land owners have a say about the inclusion of their land into hunting areas, and whether private land owners within a hunting area can close their land to hunters (Cirelli, 2002).

Hunting areas may also be established on public lands. Provisions on hunting areas on state land are very common in Central Asia and the Caucasus, as they lead to the creating of **hunting "economies"** or farms. In Armenia, for instance, hunting is carried out exclusively on selected "hunting areas" on the basis of a list to be approved by the government on forest or agricultural lands. "Hunting economies" are established for the use of hunting areas and animals through an agreement with the administration, at the end of a tender procedure. The agreement holders must prepare a programme for the development and management of hunting economies for approval by the competent body (Law on Hunting, article 26). Similarly in Georgia, hunting grounds are especially allotted for a "hunting economy", which may be created after a detailed ecological and economic assessment, and subject to an authorization procedure under the Ministry of the Environment's responsibility and the adoption of long-term (ten years') hunting management plans (Law on Wildlife, article 15). In the Russian Federation, hunting grounds can be allocated to the state, cooperatives or hunting associations for a period of at least ten years (Ministerial Decree n. 1548 of 1960, as amended).

Uzbekistan allows various legal entities to manage hunting grounds as "hunting economies". State organizations manage state and forest hunting

farms; public associations and other non-governmental organizations manage non-commercial or recreational hunting farms; individuals and private entities manage private hunting farms. The State Committee for Nature Protection, or the Main Department of Forestry (if the hunting grounds are established on forest land), allocates rights to manage hunting grounds and sets them out in an agreement. Such an agreement is valid for up to ten years and includes rights and obligations of the managers of the hunting grounds (including the duty to take wildlife monitoring and protection measures, and to report relevant information to governmental bodies in this regard) (Ministerial Decree n. 508, articles 53–58).

Closed or open hunting areas may have impacts on the poor, either because they facilitate or impede traditional practices in the area, or because they may provide business opportunities to landowners or those being allocated an authorization to manage the area. These considerations should therefore be taken into account in the decision-making process. In Sabah (Malaysia), for instance, the state governor can establish **wildlife hunting areas** by declaration subject to a consultation procedure. The proposal should include details for any native or traditional rights in the proposed wildlife hunting area and a summary of consultations undertaken with relevant government agencies and communities likely to be affected. The law requires the state to prepare a management plan within three years from the declaration. Any person may hunt any animal in the appropriate zones of the wildlife hunting area, upon a permit issued by the Sabah Wildlife Department Director. Native and traditional rights as specified in the proposal may continue to be exercised (Sabah Wildlife Conservation Enactment, article 64 and ff.).

Box 6-5-4: Legal options for defining hunting areas

In general, the legal creation of hunting areas should stipulate that the following must be in place prior to allowing hunting:

- a clearly defined area. If the area is under private ownership, this should be upon initiative of concerned land owners or in agreement with them;
- sufficient resources to support and ensure the sustainability of the type of hunting permitted;

- a designated management entity, whether government, a private operator or a local community or a body set up for this purpose, in which public and private stakeholders are represented;
- identification of existing rights on the proposed area, and consultations with right holders, as well as consideration of traditional use and opportunities for (or negative impact on) local and indigenous communities' livelihoods;
- trained managers within designated management entity;
- a management plan with clearly defined requirements for its development, renewal, legal status and monitoring.

6.5.5 Regulating hunting methods

International initiatives have addressed the need to prevent cruelty and suffering to animals by means causing "extreme, prolonged or avoidable suffering" (IUCN) and to adopt regulations setting out specific humane trapping practices to ensure that the most humane and selective techniques available are employed in the capture or killing of wild animals (chapter 1).

Hunting laws around the world typically prohibit various techniques that are likely to result in higher harvest levels. Among them are the use of automatic weapons, pursuing animals by vehicle, destroying nests or dens, and the use of pits, triggered guns, fishing nets, chemicals, explosives, or other indiscriminate hunting techniques. To mention just one example, in Bangladesh, hunting restrictions include prohibitions of hunting by a gun trap, an explosive projectile bomb, electrical contrivances, a baited hook, automatic weapons, anesthetizing guns, motor vehicle, poison and artificial contrivances, unless authorized by the officer in charge (Wildlife Preservation Order, article 6). The Order, however, does not provide for criteria to issue such authorization, thus leaving a significant gap in the provision. In China, hunting with military weapons is forbidden (Wildlife Protection Law, article 21). In Turkey, explosives, electronic or electrical stunning devices, dazzling devices, devices for illuminating targets, nets, non-selective traps, and gassing are also prohibited directly by the Hunting Law. The EU Habitats Directive Annex VI has a list of prohibited hunting methods and transport, which may be of special interest to countries interested in harmonizing their requirements with the EU (see section 1.6 above).

It should be noted that hunting restrictions are not by any means universal. The EU Habitats Directive prohibits hunting with crossbows. US states instead generally support archery hunting and often declare a special season for it. Some states treat crossbows as archery weapons. Some treat them in the same class as firearms. And some restrict their use to handicapped hunters.¹⁰⁶ It should also be borne in mind that certain hunting methods may fall under exceptions for traditional hunting methods (see section 6.5.7 below).

While these restrictions may be appropriate and clearly outlined under the regulatory framework, enforcement is still a concern. To provide an additional layer of protection, laws may prohibit not only the use of these techniques, but also the possession of these instruments when a person is on hunting grounds. Legislation may also limit the time of day for hunting; for better safety and enforcement, some jurisdictions ban hunting at night. Safety issues may also justify the prohibition to hunt near settlements or roads.

A few additional restrictions commonly accepted internationally can decrease the effect of hunting pressure. They are not as easy to use and are likely best included in a regulation with reference by organic legislation. These include establishing size or age limits. Size limits are often applied in fishing regulations where it is possible to measure the fish before killing it. They may also be effective for other species if the hunter can readily determine the size before making a kill. For example, deer regulations can use the existence and/or size of antlers to restrict the take of females or young. For birds, the law can prohibit the taking of eggs. Using size limits effectively may require some scientific basis for their determination. The law can require or allow the determination of appropriate size limits and delegate the authority to impose harvest restrictions based on them.

Another option is to allow sex-based limitations concerning the number of male or female animals that may be taken by a given hunter. In some species the number of adult females determines the ability of the population to grow. Where the population is of a desirable size or a little too small, the managers can limit hunters to taking the males, and where the population is too large, managers can permit only the taking of females.

¹⁰⁶ A summary of US state crossbow rules can be found at: www.huntersfriend.com.

As with the legal tools discussed in the preceding sub-sections, regulating hunting methods need to be adaptive and science-based allowing consideration of impacts on local and indigenous communities as well as adoption of a precautionary approach.

Box 6-5-5: Legal options for regulating hunting methods

- Prohibit the use and possession of hunting methods that are considered unsafe, inhumane, non-selective or difficult to monitor, based on a transparent and adaptive decision-making process;
- establish game size limits where appropriate or require the determination of appropriate size limits and delegate the authority to impose harvest restrictions based on them;
- institute sex-based limitations;
- to avoid placing too great a burden on the implementing agency, allow a grace period for the determination of the above;
- permit traditional hunting methods that do not undermine environmental sustainability.

6.5.6 Ensuring a transparent and effective allocation of hunting rights

After having determined when people may hunt, where people may hunt and how people may hunt, the law must answer the question, who may hunt? Several instruments can allocate hunting rights, and the choice may depend on whether there is public or private ownership of resources (chapter 2).

The first question for legal drafters to address in this regard is: who can actually hunt at all? The law may decide this by residence (people who live in the area have one set of rules, and people outside the area another), by belonging to certain groups (indigenous people have one set of rules and non-indigenous another), by motive (recreational versus commercial), by age (you must be 14 or older to hunt), by knowledge (you must pass a test or take a class to hunt), by payment (you must buy a license or buy liability insurance), or even by chance (you must win the tag lottery). The second question to be addressed by legal drafters is, does anyone besides the government get to say who can hunt on a particular piece of land? (see

section 6.5.4 above.) This overlaps with the "where" question. The law may allow private owners to sell hunters access to land; this approach may encourage some private owners to invest in sustainable management of game species. Or the law may allocate to private persons the right to control hunting access to public or mixed public-private lands. Here you have concessions (see section 6.8 below). The object is typically (but not always) to turn management of the land over to the concession holder, who has a financial incentive to manage the game resource well (but not necessarily the same incentive to look after the other natural resources of the area).

Usually, **permits or licences** are used to allocate the right to hunt certain species or animals. Whatever the instrument, or combination of instruments, available for allocating hunting rights, wildlife laws should ensure that the process for their allocation is transparent based on certain environmental sustainability guarantees, linked to management planning (chapter 3) and/or quota-setting (see section 6.5.2 above). To this end, the law should also provide some degree of security for hunters to be encouraged to consider long-terms effects. The law should specify clearly the rights and obligations of wildlife users, as well as the causes for the suspension, termination or renewal of their permits/licenses. They may also facilitate law enforcement, by allowing for easier identification of hunters and by using the suspension and cancellation of licences as a means for preventing breaches of law or for eliminating their consequences. Furthermore, when insurance is required to cover damage that may be caused by hunters, the law may require that it should be purchased at the time of the application for or issuance of the licence (Cirelli, 2002).

In the US, allocation is largely a matter for the states, or in some cases where Indian tribes have reserved hunting rights through treaties, for the tribal governments. The US federal government does require waterfowl hunters to buy and sign their signature across an annual stamp.¹⁰⁷ Besides being a prerequisite for hunting, the stamp allows free admission into federal wildlife refuges and so is also bought by eco-tourists. The income from stamp sales goes to purchase or lease land to add to federal refuges. US states typically require hunters to buy an annual license. The state may require the hunter to have some knowledge of gun safety, particularly if the hunter is young, however other knowledge requirements are rare. States may charge non-

¹⁰⁷ See www.fws.gov.

residents higher license fees. States may also require hunters to buy a tag for the particular species the hunter is seeking.

Conditions for obtaining authorizations should be clearly spelt out. In Sabah (Malaysia), hunting licenses can be issued by the relevant authority in absolute discretion. Although hunting license cannot be issued unless the applicant is in possession of suitable firearms, competent to use them, and able to identify the animals of the species listed in the Schedules, the relevant authority may refuse to grant a license without assigning any reason for such refusal (Sabah Fauna Conservation Ordinance, articles 4–6). The lack of limits to the discretion of licensing authority may be considered unfair by users, and should be avoided also with a view to preventing corruption. Legislation should also establish whether hunting licenses could or not be transferable. In India and Peninsula Malaysia they are not, for instance (Wildlife Protection Law, article 25; and Protection of Wildlife Act, article 45, respectively).

In Japan, applicants can receive a hunting license upon passing a **hunting examination** overseen by prefectural governors, which tests the applicant's knowledge of hunting safety and ability to identify game animals. Hunters must then register with the prefectural authorities of the area where hunting is to take place, and pay a hunting fee and registration tax. A "wildlife protection leader" will ensure hunting control and provide guidance for wildlife protection (Tsiousmani and Morgera, 2010). In Kazakhstan, "hunting certificates" or "hunting IDs" are necessary to certify the taking of an exam on legislation on protection, reproduction and management of wildlife (Law on Wildlife, article 9). Both in Chile (Hunting Law, article 8) and Costa Rica (Wildlife Conservation Law, article 41), professional hunters are similarly requested to successfully complete an exam to prove their knowledge of hunting regulations. In France, hunters' associations are tasked by legislation to train hunters and prepare the hunting licence exam (Environmental Code, article R421-39) which tests knowledge of wildlife, hunting regulations and security rules.

In Zambia, applications for any licences may be rejected if the applicant "is not a fit or proper person to hold such a licence" or if "the Director-General [of the Wildlife Authority] is satisfied that in the interest of good game management the licence should not be issued;" reasons for the refusal must be stated in writing (Tourism Act, section 58). A clear determination of the **grounds for rejection** of application would be preferable in this respect, to limit the

discretion of authorities and provide more transparency to the process. The obligation to provide written justifications for refusal and the possibility to appeal against a negative decision should also be provided.

Legislation should also specify in detail grounds for suspension or revocation of licences. In Zambia, licences may be revoked in case of failure to comply with conditions or suspended "in the interests of good game management". Appeals to the Wildlife Authority, and subsequently to the High Court, of decisions to reject applications or suspend or revoke licences are possible (Wildlife Act, section 60). This is quite a useful tool to increase authorities' accountability and build users' trust in the system. In Peninsula (Malaysia), however, licenses may be suspended, revoked or withdrawn without assigning any reasons, if the relevant minister has reason to believe that any of the provisions of the act, regulations, rules or conditions have been contravened (Protection of Wildlife Act, articles 44–45).

Legislation should further set out other **requirements** that should be complied with after the issuance of the licence. In Peninsula Malaysia, licensed hunters should be listed in a register kept by the Director General of the Department of Wildlife and National Parks, and must record their killings or takings in the appropriate space provided in the license (Protection of Wildlife Act, articles 35–36). In France, hunters must become members of a hunters' association and have a valid insurance for any physical damage caused during their hunting activities. The insurance also must cover damage caused by hunting dogs (Environmental Code, article L423-16).

Consideration of **social issues** could be built in the authorization system. In Angola, when allocating hunting rights on public land, priority should be given to nationals, and particularly to members of local communities residing in the area in which wildlife is located (draft wildlife law). In addition, in allocating hunting rights, the law should require consideration of third parties' rights, with a view to preventing future conflicts, including any existing use rights to use the concerned land to hunt or for any other relevant purposes (use of wood and non-wood forests products, grazing, tourism, fishing etc.).

Overall, wildlife laws should specify the rights and duties of hunting rights holders, with a view to creating a situation of shared responsibility among wildlife managers, users and authorities. Authorities should be responsible for ensuring the conditions (necessary legal and administrative action) under

which managers and users can sustainably use wildlife resources, as well as provide technical advice when necessary. Users should be specifically called upon to respect certain social and environmental requirements in the exercise of their rights.

In doing so, wildlife law drafters should avoid unnecessary requirements for the allocation of hunting rights. The complexity of license requirements are usually to blame for lack of compliance generally, and especially by remote communities. Often, licenses and tags are only available in central government institutions or issued through hunting societies that are not easily accessible to all users of the resource. In general, the cost of travelling to and from license distribution centres, when weighed against the low likelihood of being caught, is too great. So, most individuals faced with this problem, hunt without a license and the requirements go ignored. To address these issues, it is common in the US, for instance, for the law to allow shops that sell supplies for hunting and fishing to also sell individual licenses as agents of the state. Thus, it is usually possible to get a hunting or fishing licence on short notice and without travelling far from the hunting or fishing area.

The law may require tourists or inexperienced hunters to hunt in the company of a licensed **guide**. The guide's license may or may not be specific to any particular hunting area, but the guide usually has no management responsibilities beyond ensuring that the client acts responsibly towards the resource. In this case, the principal legislation or specific subsidiary legislation usually sets out the requirements to obtain the hunting guide licence. In Burkina Faso, the Central African Republic and Congo, for example, a guide must pass an examination to demonstrate knowledge of wildlife legislation and species and the ability to handle weapons (Cirelli and Morgera, 2009b). In the Democratic Republic of Congo, hunting guides must complete a period of apprenticeship of 36 months and pass a test, for which procedures are specified in the legislation (Order No. 014/CAB/MIN/ENV/2004, articles 46–52). In Gabon, the government auctions the right to guide hunting in particular areas (Forestry Code, article 203). Some states of the US require guides to register or have a license. For example, Oregon (ORS ch. 704) requires "outfitters and guides" to register with the state, to have knowledge of first aid, and to have liability insurance. Courts can revoke the registration if the outfitter or guide is convicted of violations of hunting or fishing laws. Sometimes the guiding license is area-specific and may even grant a monopoly.

Overall, the law may want to establish standards to ensure prospective guides are technically and possibly financially qualified. Typical standards include:

- whether the applicant has violated hunting laws in the past. The law may limit this to major violations, intentional violations, recent violations or even multiple violations;
- whether the applicant has the basic knowledge to carry out the task. A guide's knowledge might have to cover species identification, hunting laws, weapons safety, first aid and related matters. Standards might be different for indigenous groups, assumed to have local knowledge, and outsiders;
- whether the applicant has the financial capacity to carry out the task. This might be a matter of having insurance, or it might require posting of a bond.

With regards to guides' responsibilities, in Burkina Faso, guides are responsible for the safety of their clients and for damage caused by them. They are also jointly responsible for violations committed by clients, unless they prove that they had done everything possible to prevent the offence (Forest Code, article 137). Cameroon includes similar provisions (Forest Code, article 137). In Mali, hunting guides must ensure that their clients comply with the law, protect them from risks and record expeditions and animals hunted. They must be fully covered by insurance for their responsibilities (Decree No. 97-051/P-RM, articles 17–18). These provisions are aimed mainly at ensuring the safety of hunters and the reliability of guides who will accompany and lead them. Where objectivity in the granting of licences and certificates is ensured, they are also a useful means to ensure equitable treatment to applicants. This is not the case where qualification requirements are not clearly set out.

In the case of licences or certificates for guides, grounds for suspension or termination are specified more often than for any other licences or permits. Cameroon, Gabon and Mali appropriately include a list of possible reasons for suspension. In Cameroon, this list included the case in which the guide in charge of a hunting area violates the technical specifications attached to the licence, allows hunting in protected areas or commits five violations of the law (Wildlife Decree, article 52). In Mali, for instance, grounds for suspension or cancellation of the hunting guide licence include giving false information at the time of application and allowing clients to hunt against the law (Decree No. 97-051/P-RM, article 25). In Gabon they include second offences in relation to hunting, hunting in closed seasons or beyond

the limits of the area of which the guide is in charge and allowing illegal hunting by foreigners (Forestry Code, article 207).

The profession of hunting guide may provide significant income to local and indigenous community members, who can use their traditional knowledge of wildlife and its habitats to support hunters, while monitoring hunter behaviour and contributing to sustainable wildlife use. Legislation could possibly support local people in becoming hunting guides, for example by giving priority to them in the allocation of licenses. Along similar lines, in Cameroon, some hunting areas are reserved to nationals or national companies, to encourage nationals to take up the profession of hunting guide (Wildlife Decree, article 18).

Box 6-5-6: Legal options for a transparent allocation of hunting rights

- Avoid over-regulation or complex authorization systems; in all events, the systems should not be too costly or difficult to access for remote local and indigenous communities;
- set clear conditions for the issuance and suspension of permits, requiring authorities to justify in written form their decision;
- require demonstrable capacity as a prerequisite to obtaining hunting rights: the applicant should demonstrate his/her capability to respect hunting restrictions. At a minimum, legislation should ensure that individuals who have repeatedly or seriously violated relevant rules and regulations in the past no longer are eligible for license/permit to hunt;
- establish standards for professional hunters through comprehensive programs offering both theoretical and practical training and/or examinations. Hunters that pass these examinations and/or successfully serve an apprenticeship should become registered with the national hunting association or government before being allowed to conduct hunts professionally;
- require consideration of social issues in the allocation of authorizations, possibly giving priority to local and indigenous users;
- require consideration of other land uses in the allocation of hunting rights;

- clearly specify rights and duties of hunters, using the possibility to suspend, withdraw or deny renewal of their hunting authorizations as a deterrent for unsustainable conducts;
- set licensing costs at a level sufficient to cover the adequate distribution of licenses;
- tie the use of licenses, where instituted, to specific penalties and fines sufficient to encourage use/discourage poaching;
- require foreign and less experienced hunters to be accompanied by local guides, setting minimum requirements for guides to contribute to the environmental sustainability of hunting, while at the same time provide incentives for local and indigenous communities' members to become guides.

6.5.7 Traditional hunting

Often legislation examined in this study recognizes **customary rights to hunt**, usually to the extent that they have not been expressly terminated and with numerous limitations. Frequently the rules on traditional rights allow their exercise only for certain non-protected species, for subsistence, non-commercial purposes and with traditional or otherwise specified weapons. There are however several ways in which legislation can recognize customary rights: it can define them and exempt them from obtaining a licence or at least from paying the licence fee; it can provide for special permits; it can give priority to customary rights in the common licensing system; it can provide the basis for the conclusion of an agreement between subsistence hunters and the government or local authorities; or it can recognize the status of community hunters.

Exemptions are quite common. In Angola, the draft wildlife law takes into account the dichotomy between statutory and customary law related to hunting. On the one hand, it confirms that wildlife is part of the national wealth and is the property of the state, with the exception of domesticated and ranched species. On the other hand, the draft law specifically recognizes the rights of rural communities to use wildlife found in their community land, according to their traditional practices and relevant legislation, with the underlying obligation to avoid exceeding customary practices and harming wildlife and its ecosystems. Subsistence hunting – which is defined as hunting

realized by local communities for their own consumption or that of their families for food, clothing, medicinal or cultural products – is free of charge and not subject to licensing, in the case of small game. Guyana, Mexico and Peru also exempt traditional hunters from licensing requirements (Aguilar and Morgera, 2009).

In Australia, holders of native title rights covering certain activities do not need authorization required by other laws to engage in hunting, for the purpose of satisfying their personal, domestic or non-commercial communal needs, and in exercise or enjoyment of their native title rights and interests (Native Title Act, section 211). In addition, an indigenous person can continue the traditional use of an area for hunting and food gathering (except for the purposes of sale) or for ceremonial and religious purposes in accordance with the law (Environmental Protection and Biodiversity Conservation Act, section 303BAA).

Other countries, such as Ecuador (Biodiversity regulations, article 86) and Guatemala (Protected Area Law, article 46), simply relieve subsistence hunters from fees applicable to the issuing of hunting permits. Mere exemptions from paying licensing fees, however, may not be an effective way to deal with subsistence hunting, however, as requiring permits for these activities may create bureaucratic obstacles to activities that support the livelihoods of the poor. In Mexico, national authorities are tasked with supporting communities in complying with the legal requirements established. Subsistence hunting, however, can be prohibited if the existence of a species is endangered by these practices (Wildlife Law, articles 92–93).

Certain exemptions may also be accompanied by the possibility for traditional hunters to **self-regulate** their activities. In Guyana, Amerindians are exempted from the Wild Birds Protection Act (article 7). The law also recognizes the rights of Amerindians living in the vicinity of certain national parks to continue to fish, hunt and forage in a manner consistent with sustainable management of forests and wildlife (Kaitetur National Park Act, article 3). The Village Council of the designated Amerindian area or village may prohibit certain methods of trapping and may implement rights and restrictions regarding the development of agriculture and livestock (Amerindian Act, article 23).

US laws reserve certain **benefits** from wildlife and traditional uses of wildlife to Native Americans. For example, the Bald Eagle Act, 1940, generally

prohibits taking, possession and commerce of the bald eagle, but permits Native Americans' religious uses of eagle feathers. The Secretary of the Interior retains sole authority to allow taking and using of the bald eagle for scientific purposes, exhibition purposes or religious purposes of Indian tribes (16 USC 668a). The governor of any state can also request the Secretary of the Interior to authorize the taking of eagle to seasonally protect domesticated herds and flocks in a state (16 USC 668a). In addition, a number of Native American tribes reserved rights to hunt on lands they otherwise ceded to the United States. The scope and substance of rights reserved by each tribe are diverse. Certain tribes have obtained judicial recognition of the right to prevent adverse effects to their ability to exercise off-reservation hunting rights through an injunction against activities that would destroy the habitat of species heavily relied upon by tribal members in the exercise of their reserved rights (Goodman 2000). For some tribes, courts have held that state regulation of the harvest of migratory species must allow enough of the population to reach tribal areas to give the tribes a fair opportunity to take the species (see, e.g. *Sohappy v. Smith*, 529 F.2d 570 (9th Cir. 1976), involving migratory salmon). The same may be applicable for terrestrial or avian migratory species.

In the Russian Federation, the law recognizes traditional management as historically developed methods of wildlife management ensuring sustainable use of wildlife by sparsely distributed indigenous populations of the North of Siberia and of the Far East of the Russian Federation. The area subject to traditional management is to be classified as a protected area of federal, regional and local significance by a decision of the federal government in agreement with the state bodies of the corresponding subjects of the Russian Federation, upon an application submitted by the representatives of sparsely distributed indigenous population. Within such territories, hunting grounds and hunter's bivouacs are allotted (Federal Law on Territories of Traditional Nature Management).

Special permits for subsistence hunting are instead used in the Democratic Republic of Congo, where rural hunting permits along with collective hunting permits are a way of regulating customary hunting rights. Holders of rural or collective hunting permits may be exempted from the payment of annual fees, particularly where they have little or no availability of resources (Hunting Law, article 5). Similarly, in Sabah (Malaysia), a village hunting license may be granted to a suitable person to hold it on behalf of and for

the benefit of the village (*kampung*) to which the person belongs (Sabah Wildlife Conservation Enactment, article 32).

A variation can be that of recognizing the special **status of community hunters**, which may involve less bureaucratic procedures. In Mozambique, the law specifically addresses the role of community hunters, who are individuals that have been recognised by their community as qualified for hunting in accordance with traditional practices. Community hunters need to be recognised as such by the provincial services for forest and wildlife management, based on a verbal declaration of the hunter accompanied by five community members as witnesses. The status of community hunters cannot be transferred. Community hunters are responsible for defending their community from animal attacks (Wildlife Regulation, article 63).

Another legal tool is to allocate **priority** to traditional use in issuing general authorization for wildlife use. In Georgia, the Law on Wildlife recognizes that citizens "whose existence is traditionally connected with wildlife" may be given special rights in the field of protection and use of wild animals and their habitats. In particular, Georgian citizens (and their unions) "whose ancestors and their native habitat and traditional right of life is connected with animals" have a right of "priority use" of wildlife, in the territories where they are traditionally settled. This includes a right to choose wildlife hunting lands and to establish a hunting economy and a general "exceptional right to get certain animals and products". The Ministry of the Environment determines the list of areas where such priority rights may be implemented (articles 13 and 40). In the Philippines, indigenous peoples have priority rights in the harvesting, extraction, development or exploitation of any natural resources within the ancestral domains (Indigenous Peoples Rights Act, section 57). A non-member of the community concerned may be allowed to take part in the development and utilization of the natural resources for a period not exceeding 25 years renewable for not more than 25 years, on the basis of a formal and written agreement or a decision by the community concerned pursuant to its own decision-making process (Wildlife Act, section 7).

The Marine Mammal Protection Act of the USA allows native peoples in Alaska to pursue subsistence hunting and hunting for traditional handicraft materials such as walrus tusk ivory. The Alaska Native Lands Conservation Act of 1980 reserved over 40 million hectares of public land in Alaska as wildlife refuges, parks, and other classifications but permitted subsistence

hunting and fishing to continue in many of them. The rights go to both indigenous and non-indigenous peoples. The law directs land managers to give subsistence uses priority over other uses. It also sets up regional advisory councils and local advisory committees to ensure public participation in subsistence-use-related planning. The law gives subsistence users a right to sue in federal court if their rights are infringed. The subsistence provisions, in Title VIII of the law, go into great detail on policy and planning points.¹⁰⁸

Legislation in the Russian Federation provides both for priority rights and for special rights. "Sparsely distributed" indigenous populations and ethnic communities whose culture and way of life include traditional methods of protection and use of wildlife are granted rights of priority use of wildlife on their traditionally inhabited lands, including priority in the choice of hunting areas, preferences as regards hunting seasons, sex, age and number of the objects of wildlife authorized for hunting and other types of wildlife use in coordination with wildlife management bodies. In addition, the law grants special rights to traditional users whose subsistence and earnings are totally or partially dependent upon traditional ancestral systems (including hunting) to use, individually or collectively, traditional methods of wildlife use. Special rights are, however, subject to certain conditions, namely methods must not negatively impact on sustainable reproduction of wildlife, disturb natural habitats, or be not harmful to man and are not incompatible with the sustainable use of wildlife (Wildlife Law, articles 9 and 48–49).

Other methods to recognize traditional use have also been envisaged. In Canada, the indigenous First Nations of the Yukon, pursuant to a **self-governance agreement** they entered into with the federal government, are granted the power to enact laws governing gathering, hunting, trapping and fishing and the protection of fish and wildlife and their habitats within their boundaries (Yukon First Nations Self-Government Act, article 3).

In the USA, subsistence rights of Indian tribes depend in part on the treaties that they have made with the federal government, and so they vary from tribe to tribe. One interesting concept from native American case law is the idea of **opportunity to take**. The idea is that planning and take limits for the non-native hunters must leave the native population the opportunity to take a fair percentage of the fish or game. In the American cases, the courts have

¹⁰⁸ See alaska.fws.gov.

set this at 50 percent for the tribes whose treaties promised that tribal members could fish and hunt "in common" with settlers. Another common treaty provision allows tribal members to hunt and fish at the "usual and accustomed places" without interference, to the extent that the tribes can prevent private landowners from excluding them from traditional fishing grounds (*United States v. Winans*, 198 US 371 (1905)).

The above-illustrated examples show a variety of approaches to recognizing traditional rights. The determination of the most appropriate method in the specific circumstances of a country can only be done on a case-by-case basis.

It should, however, be cautioned that legislation may thus address customary rights more for the purpose of **limiting** them than to facilitate their exercise. In Burkina Faso a specific "*raabo*" (type of ministerial order) significantly limits subsistence hunting by allowing it to be practiced only within village hunting associations, requiring a permit against the payment of a fee (Raabo No. AN-VII 0001/F/MET/MAT/MF of 1989 concerning village hunting). Mali sets out rights to practice hunting for ritual purposes, a less common form of traditional rights (Order No. 95-2489/MDRE-SG). In the Central African Republic, limitations are slightly less strict, allowing customary hunting for purposes of subsistence of the whole village community and without a permit, even if an area has been allocated under a concession (Wildlife Ordinance, articles 35–38).

In Angola, the draft wildlife law places several restrictions on subsistence hunting: it should occur in the area in which the local community resides and in areas in which other communities reside only with their agreement. Products exceeding the subsistence needs of hunters may be commercialized (1) in limited amount, with neighbouring communities, if it is in accordance with traditions or (2) within the same community of the hunter. Subsistence hunters must be listed in a register, together with the number of the animals, species and areas of hunting, to be maintained by local observers.

Lao PDR recognizes customary rights to use of unprotected wildlife for cultural purposes, within the village limits set in accordance with rules and regulations. Customary hunting rights are also recognized for unprotected wildlife, as well as for partially protected wildlife, but only for animals, areas and seasons specified by the authorities (Wildlife Law, articles 32 and 24). Peru's native communities and farmers are allowed to benefit from wildlife for subsistence or ritual purposes in their lands and adjacent areas, but their

entitlement cannot prevail over third parties' competing rights, and thus is terminated when the government assigns the resource to any other entity (Peru's Organic Law, article 17).

For the purpose of enhancing rural livelihoods, the law should allow customary hunting to the maximum extent possible, subject of course to sustainability. Therefore, limitations tending not to exceed sustainable yields or to avoid destructive methods are justified, while others need to be carefully considered and sometimes avoided. For example, requirements for permits may be difficult to implement both for the administration and for the concerned people and may be set out just for the purpose of gaining permit fees, although these may be quite limited. While such requirements are likely to remain unobserved, they do not help build a cooperative attitude between communities and the administration, inevitably pressing the poor outside of the rule of law.

In Angola, the draft wildlife law provides that the government may **suspend** subsistence hunting for repeated violations of applicable legislation or when the community observers, local authorities or traditional chiefs find that a hunter is not sufficiently qualified for the exercise of the right. In Latin America, traditional use of wildlife beyond private or community lands – when recognized – is generally a **precarious right**: it may be tolerated but may not be asserted against holders of other rights (Aguilar and Morgera, 2009).

As with other aspects of wildlife management, a key contribution to the determination of appropriate, feasible rules could come from consultation with the concerned people. Provisions that envisage the regulation of customary rights **in consultation with customary users**, however, are rare. Consultation can also be a useful means to reach consensus on limitations to customary hunting if it takes place within traditional hunters' associations. This is reported to take place in Liberia, where some of the associations have adopted their own rules for the sustainable harvesting of bushmeat (Cirelli and Morgera, 2009b). Management planning, whether formal or informal, should address subsistence uses and in the process should involve consultation with subsistence users (chapter 3). Adequate consideration, and where possible continuation of traditional practices, is also a significant contribution to the livelihood of rural people, whose skills and knowledge can thus be utilized in benefiting their interests as well as those of society.

Box 6-5-7: Legal options to address traditional use

- Avoid undue regulation of traditional hunting as long as it sustainable and particularly when it contributes to meet subsistence needs, for instance by exempting traditional hunters from licensing requirements, yet submitting them to certain monitoring to ensure continued sustainability;
- require integration of traditional hunting into wildlife management planning;
- give priority or special rights to traditional hunting in general license or concession allocation;
- require consultations with relevant groups and communities before issuing regulations on traditional hunting or addressing traditional hunting in management plans;
- state clear conditions for the suspension or termination of traditional use rights, with the possibility to remedy to the first/minor instance of non-compliance;
- allow appeals against decisions related to traditional hunting;
- address possible conflicts between traditional and other types of hunting (in management planning, by giving priority to traditional hunting in the authorization process where it contributes to meet subsistence needs, etc.).

6.5.8 Regulating hunting tourism

The European Charter on Hunting and Biodiversity stressed the potential role of hunting tourism in the conservation of wildlife and biodiversity, suggesting that legislation promote forms of hunting tourism that provide local communities with socio-economic incentives (chapter 1). Hunting tourism is sometimes specifically addressed in national legislation.

Legislation, as mentioned above (section 6.5.6), may require that foreign hunters be **accompanied by local guides**. Persons entering Botswana on a "commercial tour" must be accompanied by a guide licensed in accordance with the regulations, which provide for professional guides, assistant professional guides and special guide licences. Foreign hunters must be

accompanied by a professional hunter, also to be licensed in accordance with the regulations (Wildlife Conservation and National Parks (Hunting and Licensing) Regulations, regulations 16–32). In Mexico, foreigners engaging in recreational hunting must conclude a contract with an authorized operator, who must own a wildlife management unit (so-called, UMA) and have all permits required by the law (Wildlife Law, article 96).

Similarly, Kosovo requires tourist hunters to hunt under the supervision of a licensed resident hunter and with the permission of the manager of the hunting area where the visitor is hunting (Law on Hunting, article 11(6)). In practice, then, it is up to the local hunting area manager to set any fees for tourist hunters. These arrangements provide, on the one hand, an opportunity to ensure the environmental sustainability of hunting tourism, by empowering guides to control tourists' conduct. On the other hand, they allow local guides to partake in the financial revenues of hunting tourism.

Another legal tool that is often used is to provide for **special licences**. This may be used to control the number of foreign hunters in a country or region and to monitor their conduct, as they may have no stake in the long-term environmental sustainability of the activity in a country they may visit just once. In some instances, however, parallel legislation on hunting tourism may provide more favourable and less transparent conditions for tourist hunters, allowing elite capture of significant revenues. Generally special licences justify higher license fees for foreign hunters.

Many US states issue tourist hunters the same license as resident hunters but charge them significantly higher fees, particularly for big game. For example, in Wyoming, the resident fee for a license to hunt elk is US\$50, while the non-resident fee is US\$575 (but the non-residents also get fishing privileges with their license). The state issues a limited number of non-resident elk-hunting licenses and offers the chance to buy them in two lotteries. In the first lottery, the state offers 40 percent of the licenses, and the winners must pay a premium of US\$480 dollars, in addition to the US\$575, to get their license. Typically, fewer people enter the first lottery, so by being willing to pay the higher fee, the hunter is more likely to get a license. Non-residents who do not win the right to buy a license in the first lottery are welcome to try for one of the remaining licenses in the second, paying the usual non-resident fee if they win (Wyoming Statutes 23-2-101).

Because of the higher revenues from hunting tourism, there is an opportunity to benefit local and indigenous communities by involving them as guides or as observers in areas where hunting tourism occurs. To this end, it should be avoided that hunting tourism is regulated in a non-transparent way. Once again, ensuring public participation in the regulating of hunting tourism may be beneficial in this respect.

Box 6-5-8: Legal options to regulate hunting tourism

- Require that foreign hunters are accompanied by local, qualified guides;
- require that local and indigenous communities be involved in the regulation of hunting tourism occurring in or near the areas in which they live or carry out their traditional practices;
- require that the economic benefits of hunting tourism are shared with relevant local or indigenous communities;
- ensure monitoring of hunting tourism, involving local and indigenous communities.

6.6 Sharing of benefits

Although revenues from the wildlife sector may be considered irrelevant as a contribution to the national GDP, they may be significant at the local level. These revenues can constitute a considerable amount to be channelled back to wildlife management and local communities that are affected by wildlife management. Provisions that give local people or managers benefits, such as a share of revenues from wildlife use, may be useful – depending, of course, on the quantity of funds and the restrictions on use. Legislation needs to allocate clear responsibilities and transparent frameworks for the collection and allocation of these benefits. In addition, subsidiary legislation may need to spell out the mechanisms and procedures for the actual benefit sharing. These provisions, however, are not an automatic contribution to enhancing the livelihood of the poor – especially where funds are not appropriately channelled to local communities or when their quantity is small or perceived as insufficient for the limitation of rights or other damage suffered.

Also, legislation should not be too restrictive in determining the use of economic benefits by communities; rather it should provide a flexible framework, allowing case-by-case decisions on the use of economic benefits depending on the priorities of each community. In addition, non-monetary benefits may also be critical and should be considered alongside with monetary ones by legislators and the administration. Non-monetary benefits generally include training and employment opportunities, as well as recognition of merit.

In all events, these solutions should be coupled with genuine support for the direct involvement of local populations in the undertaking of productive activities related to wildlife management, both by using available funds for this purpose and by devolving management responsibilities and related rights to benefit from wildlife management. This generally requires improving the legal framework recognizing use and management rights and strengthening the security of these arrangements. The duration of these arrangements should promote the creation of long-term incentives in the sustainable management of the resource, and rewards (such as automatic renewal of these arrangements) for sustained good management practices (see section 6.7 below).

General references linking wildlife management to **poverty reduction** can sometimes be found in legislation. In Burkina Faso, the protected areas institution is to develop partnerships between state, local authorities, civil society and the private sector and promote the fight against poverty through forest and wildlife resource management (Decree No. 2008-171/PRES/PM/MEF/MECV/MAHRH, article 1(2)). In Liberia, authorities, in collaboration with local communities, non-governmental organizations, and interested international organizations, must undertake efforts to provide alternative livelihoods for communities adversely affected by the establishment or maintenance of protected forest areas. In addition, the relevant authority in Liberia must prepare an annual report of activities, which must describe "the nature and monetary value of benefits provided to every local community (National Forestry Reform Law, articles 9(10) and 3(4)). In Uganda, among the purposes of the Wildlife Act is the enhancement of economic and social benefits from wildlife management by establishing wildlife use rights and the promotion of tourism (section 3). Sometimes policy documents may provide direction to legislation to this effect. In Viet nam, one of the objectives of its 2003 Strategy for the Management of Nature Conservation Zones is the combination of conservation and development activities, so that the nature

conservation zones contribute to comprehensive growth, hunger elimination and poverty alleviation.

Specific legal tools to ensure the sharing of benefits derived from sustainable wildlife management are not widespread. In Liberia, forest management contracts must require the holder to establish a **social agreement** with local forest-dependent communities, approved by the authority, defining benefits and access rights. A similar provision applies to "private use permits", for which the landowner and the applicant undertake social obligations with respect to local communities (National Forestry Reform Law, articles 5(1) and 5(6)).

Provisions regarding the sharing of money or other benefits derived from wildlife between the administration and the people have been expressly included in the wildlife legislation of a few countries with the goal of supporting local communities. The first set of specific issues that legislators should address concerns the **type of benefits**: cash, tools and equipment, community infrastructure like roads, schools, clinics, vouchers for spending at local stores for food and other necessities, expert advice, employment, etc. Sometimes what the community may be most interested in is an acknowledgement from the government that this land belongs to the community, and not to other communities or to the government at large.

According to Angola's draft legislation, various benefits can be accrued by local communities in partial reserves, national parks and protected landscape areas. Communities have priority in the recruitment of protected area staff, and a right to the allocation of a certain percentage of the revenues from protected areas (15 percent of the entrance fees) for the promotion of the communities' well-being. Moreover, communities may have priority in the allocation of the right to manage protected areas for ecotourism purposes or in the provision of services related to accommodation and guided tours. Furthermore, the budgets for protected areas need to include an annual allocation to provide prizes to the local residents that have best served the conservation of the area (draft Protected Area Regulation).

Zambia reserves 50 percent of licence fee revenues to community resources boards and part of the meat of hunted elephants goes to the local community (Wildlife (Elephant) (Sport Hunting) Regulations). In Mozambique, 20 percent of any fees related to wildlife use should be allocated to local communities residing in the area in which the use took place (Wildlife Regulations, article 102).

The Alaska natives have a rather unusual benefit-sharing set-up, which has been working well for benefits from mineral development, and may provide a useful idea for wildlife management. The government pays benefits to a set of corporations. People born into the native groups automatically become stockholders in one of the corporations and can vote on its leadership. The corporations pay cash dividends to stockholders, but they also invest in economic development in their region, providing jobs where otherwise people would only have subsistence living (Alaska Native Claims Settlement Act, 1971).

Other benefits may also be realized, such as priority in the allocation of the right to manage areas for ecotourism or in the provision of services related to accommodation and guided tours; the possibility of receiving monetary prizes for the local residents that have best served the conservation of protected areas; or priority in access to training and local employment opportunities. In any case, the genuine involvement of rural people in wildlife management and their participation in the sharing of revenue to which they have contributed is likely to be more successful than the option of fees being distributed by the administration.

The most difficult issue sometimes is **identifying who the affected community is**. This may explain why often provisions on benefit-sharing are enshrined in legislation on **protected areas** (chapter 4), where the affected communities can be easily identified from their presence in or past use of the areas. In Congo, local communities must be involved in the preparation and implementation of protected area management plans and must benefit from revenues generated by activities carried out in protected areas (2008 Wildlife Law, articles 20–22). In Gabon, local villages are to be integrated in the management of areas surrounding national parks through permanent collaboration with the park's management. Usage rights within these areas, including hunting, are generally free, and must be subject to a management contract with the specific objective of ensuring that any economic revenues directly benefit the communities (National Parks Law, articles 13–16).

In the Philippines, the 1993 Guidelines on the Establishment and Management of Buffer Zones for Protected Areas stated that buffer zones provide regulated benefits and livelihood opportunities to local communities. Among the criteria for selection of buffer zones are the need to provide sustainable use of land and resources by local communities; the area's suitability for production of crops preferred by the local communities; the

potential capacity of the area to prevent the community from encroaching the protected area through the provision of alternative supply of resources such as wildlife farms; the potential of the area to enhance local community participation for the purpose of increasing the level of support to, and acceptance of, the principles of buffer zone management; and the existence of traditional practices within the area. Allowable complementary activities that are mentioned include regulated hunting of non-protected species for subsistence in forest buffer zones, and traditional hunting and collection of non-protected species in multiple-use buffer zones. Furthermore, the legislation calls for recruiting site-level staff from residents living within or in the immediate vicinity of the protected area. In addition, collection of wildlife by indigenous peoples, except threatened species, may be allowed for traditional use and not primarily for trade.

In Viet nam, households and individuals lawfully living in conservation zones have the right to lawfully exploit resources, participate in and benefit from business and service activities, subject to the regulation on management of conservation zones. Profits earned from eco-tourism services must be reinvested in biodiversity conservation and local communities may participate in, and benefit from, eco-tourism activities to raise their income and awareness about biodiversity and nature conservation (Biodiversity Law, articles 28–31).

While it may be relatively clear that the people living in or in the immediate vicinity of a protected area are affected, others nearby may be using the area and feel entitled to benefits, or may suffer incidental inconvenience from development of the area. Nomadic groups may move through seasonally. Legislators may therefore still face questions such as, how to identify who is actually affected? When sharing government revenues, what share do the communities get, and how should the government apportion it among them? These can be heavily political decisions. Locating improvements like roads, agency offices or visitor centres can be controversial if more than one community is involved. The community that lands the entrance to the park and the visitor centre is going to get a lot more economic benefit than the communities on the backside of the park.

Legal drafters then need to address the issue of who should **manage the benefits**: existing government units, a special trust fund, a new local agency, individuals or communities? This can be a really hard decision. Keeping the benefits too far from the people may result in losing their support. Moving it

to local leaders may overlook traditionally disadvantaged sub-groups, such as women and youths. Moving it into individual hands and it may get diverted into short-term, uncoordinated activities that do little to alleviate poverty over the long run. (And on a related note, if the allocation is not highly transparent, funds are likely to disappear.) Certain countries prefer to channel financial benefits to local administrations, which will administer the funds for the benefit of local communities. In Botswana, for instance, fees collected from hunting are allocated to district councils (Wildlife Conservation and National Parks Act, section 16(4)). In other instances, "community funds" are established to this end: these funds (as an institution) are directly placed in the hands of the communities themselves, which are to set up accountable systems for the management of the funds. This is the case in Zambia, where proceeds from the sale of hunting licenses must in part be allocated to local communities, and the authorities provide guidelines for the use of these funds (Zambia Wildlife (Elephant) (Sport Hunting) Regulations, regulation 10(3)).

Rather than providing for benefits, Japanese legislation instead focuses on costs. The Basic Environment Law includes provisions on **cost sharing** with regard to conservation projects, noting that if the state or local government is required to implement a project to prevent interference with conservation, the persons who have caused the circumstances necessitating the project must share in the cost, according to their degree of responsibility. Similarly, persons who receive a special benefit from the implementation of nature conservation measures will be required to bear an appropriate and equitable share of the expenses (articles 37–38).

Overall, the actual impact of any of these provisions on the livelihood of the rural poor may vary depending on how money is spent or other advantages are distributed. Furthermore, even where the share of benefits allocated to people happens to be generous, beneficiaries may still consider it far from fair, especially where they perceive animals and/or land as their own property, contrary to official statements of the legislation. In drafting legislation, efforts will have to be made to set out equitable arrangements, facilitating the resolution of similar conflicts, rather than ignoring them.

The analysis of legislation shows that references to the provision of benefits to people from wildlife use when they exist, are often formulated in rather general terms that do not necessarily entail practical consequences. Sometimes they are even inappropriately drafted, resulting in ambiguities of

interpretation. Provisions that require private entrepreneurs involved in wildlife management to undertake to provide certain benefits to local people may be a good contribution to rural livelihoods, especially if negotiated with the concerned people and tailored to their needs (as noted also in section 6.8 on private sector wildlife management).

This is therefore a very complex and politically sensitive issue and comparative experience is still too limited to provide recommendations for all these questions. Analysis of lessons learned in implementation would also be necessary to assess different legal options. More innovative solutions to support the development of local populations would rather be to support the undertaking of productive activities by them, both by using available funds for this purpose and generally by improving the legal framework recognizing use rights and strengthening security of arrangements for local communities to become "managers" of wildlife, not just users (see section 6.8 below).

Box 6-6: Legal options for benefit-sharing

- Provide for the equitable distribution of benefits deriving from the use of wildlife resources among local communities who live in the vicinity or are affected by such use or by wildlife conservation, in light of their needs and contributions to sustainable wildlife management. To this end, the law could:
 - require equal distribution of returns from wildlife use to relevant local and indigenous communities;
 - ensure that additional benefits are channelled to local and indigenous communities (job opportunities, for instance, or training and capacity building);
 - promote alternative non-consumptive uses of wildlife, or provide assistance to have access to alternatives;
- ensure that an equitable share of the benefits remain with the local people when foreign investment is involved;
- allocate clear responsibilities (to public or private entities) to provide benefit-sharing;
- create transparent procedures for the collection and allocation of benefits;

- require consultations for the setting-up of benefit-sharing systems with communities directly involved in sustainable wildlife management;
- avoid overly restrictive determination of the use of rights, allowing for priorities to be set by each community;
- establish criteria for an equitable, open and transparent selection of beneficiary communities, and avenues for conflict prevention or resolution;
- require authorities to provide advice to beneficiary communities directly involved, upon their request or when considering suspension of their right.

Source: partly inspired by the Addis Ababa Principles and Guidelines.

6.7 Community-based sustainable use of wildlife

The legal reality in many countries is that local communities often have no exclusive right to use wildlife resources. They compete with, and often complain of, hunters coming in from outside the community for subsistence, recreational or trophy hunting, exploiting a resource on which they are to some extent dependent.

Without local people having a significant stake in the management of local resources, the efforts of under-staffed and poorly financed officials to patrol and protect wildlife will often be futile. The absence of such a stake both reduces the incentives of local people to comply with the law, and prevents them from insisting on the compliance of outsiders, including government officials. Therefore, the needs of local communities who live with and are affected by the use and conservation of wildlife, along with their contributions to its conservation and sustainable use, should be reflected in direct opportunities to manage the resource.

Community-based management is perhaps the most direct way to empower the poor in wildlife management. If drafted appropriately, provisions for community-based management can involve participants from the initial planning stage and can secure community rights against third parties. Such legislation may focus on hunting and other wildlife-related activities, or more generally cover natural resource management, including wildlife aspects. The law must make a special effort, however, to include the most disadvantaged

people among the beneficiaries of community-based wildlife management. Transparency and reporting requirements – having written bylaws for the community management organization, keeping open records of disbursements, publishing minutes of management meetings, producing regular reports on activities – may provide means by which to identify whether any members of a community are being marginalized for any reason.

Provisions setting out arrangements for community-based natural resource management may be **area-based**. "Community use zones", in the case of Botswana, may be set up within national parks or game reserve management plans and can be used for commercial tourism activities but not for hunting (National Parks and Game Reserve Regulations, regulation 18). Similarly, in Mozambique, special areas of "historic-cultural value" are identified with the purpose of allowing the use of wildlife for religious and other cultural practices by local communities (Wildlife Law, article 13). In Cameroon, community hunting areas (*territoires de chasse communautaire*) may be created on state land allocated to communities for them to manage wildlife resources in their own interest. The wildlife administration must provide assistance for this purpose. Communities wishing to undertake the creation of a hunting area must designate a responsible person at a meeting held for this purpose under the supervision of the local administrative authority and wildlife administration (Wildlife Decree, articles 25 and 27).

Tanzania provides for the creation of wildlife management areas for the specific purpose of community-based wildlife management within village land. Benefit-sharing must comply with guidelines which may be issued by the government and be in line with mechanisms of equitable distribution of costs and benefits. The minister must prepare "model by-laws to be adopted by the village authorities", in consultation with the minister responsible for local government. The local community must be consulted. Associations managing wildlife management areas may enter into agreements with investors, provided that representatives of the Wildlife Division and district councils are involved in the negotiations and signing. Districts, including wildlife management areas, must establish a district natural resources advisory body to advise both the authorized associations managing wildlife management areas and local government (Wildlife Conservation Bill, sections 30–32). These provisions, however, do not clarify which local community the minister should consult with, nor to what extent may the village authorities modify and adapt the by-laws to local realities. The

involvement of the administration and local authorities in agreements with investors may not necessarily protect local villagers from unequal bargains, and the direct participation of administrative officials in business dealings is hardly likely to facilitate them (Cirelli and Morgera, 2009a).

Burkina Faso also adopted an area-based approach to community-based wildlife management, namely "village hunting areas" that may be created on land belonging to a local community for wildlife exploitation. It is interesting to note the level of detail of its provisions for the creation of these areas and the participatory approach adopted. The legislation requires a meeting of the village development council to be held before the responsible village authority, and a report of the meeting to be submitted and confirmed by the concerned local authority. The community, with the assistance of the local wildlife services, may establish which activities are authorized (Forest Code, articles 99–102). Revenues are shared between local authorities' budgets and village wildlife management organizations. Every area must have a **management plan** approved by the regional wildlife administration. Hunting plans within the area are established by the central wildlife administration, upon proposal of the regional administration. Hunting of big game is prohibited except under express authorization of the relevant minister, which may be issued upon submission of a survey of wildlife populations enabling the preparation of an appropriate hunting plan. Village hunting areas are to be managed by the wildlife management commission, under the control of the Village Development Council and the Communal Council. Technically capable persons may also manage them under concessions. Village hunting areas are subject to regular surveillance by the forestry and police officials (Decree No. 2008-312, article 10).

Legal provisions on the creation of community-based management can also be found in Gabon, where applications for the creation of community forests (where activities may include wildlife management) must include a report of a meeting of the community's representative body (Forestry Code, articles 156–162). These are useful measures to promote the involvement of the whole population in the making of initial relevant determinations, to the extent that the representative body actually reflects the composition and interests of all members of society. Cameroon has similar provisions for the creation of community hunting areas, as mentioned above, but is slightly more demanding on this point, as the report must be signed by all participants in the initial meeting, thus further ensuring their actual involvement (Wildlife Decree, article 27).

Another option is to have communities organized in a **group** that is recognized by the administration and subject to a management agreement. In Zambia, "community resource boards" may be registered for wildlife management purposes: a local community neighbouring a game management area or an open area, or a chiefdom with common interest in the wildlife and natural resources in that area, may apply to the authority to this end, and must include seven to ten elected representatives of the community, one representative of the concerned local authority and one chief representative (Wildlife Act, sections 6–9). The Zambia (Community Resources Boards) Regulations then require that fifty percent of licence fee revenues be paid to the Community Resources Boards of the areas where the licences have been issued. In Kenya, any member of a forest community, together with residents in the same area, may request registration of a "community forest association". The association may then obtain approval to manage a state or local authority forest in accordance with a management agreement, which may address wildlife management, including ecotourism. Conditions and procedure (including appeals) for termination or variation of these agreements are set out in detail. In community forests, the preparation of management plans by the communities is an option (Forests Act, articles 46–49).

Namibia encourages the creation of "conservancy committee" by any group of persons residing on communal land. The relevant minister must be satisfied that: (a) the committee is representative of the community residing in the area; (b) the constitution of the committee provides for the sustainable management of game; (c) the committee "has the ability to manage funds and has an appropriate method for the equitable distribution, to members of the community, of benefits derived from the consumptive and non consumptive use of game in such area"; (d) in the identification of the area, the views of the local council have been taken into account; and (e) the area is not subject to any lease and is not a game park or reserve (Wildlife Ordinance, section 24A). An innovation introduced in 1996 is the possibility for the minister to create "wildlife councils." Such councils are created, following consultation with a community residing on communal land, if such land does not include any conservancy, game park or nature reserve or is not under any lease. There is no provision regarding the composition of wildlife councils. Provisions applicable to them are the same as those applicable to conservancies (section 24B).

In Madagascar, local communities may be entrusted the management of resources belonging to the state or local authorities, including wildlife,

subject to the creation of "*communautés de base*" within any settlement, village or a group of villages by interested people to be recognized by the administration. The arrangement is regulated by a management agreement and includes a *cahier de charges*. The *commune*, within whose area of competence the resources are found, must also participate in the agreement. The administration which has been addressed an application for this purpose must verify: (a) whether the community actually exists and the degree of interest of the local society in the request; (b) that the applicants actually represent the community and have been lawfully designated by it to represent it; (c) the quantity and quality of the relevant resources; and (d) the management capability of the community. The final decision regarding the application is made by the council of the concerned *commune*, that must publish and motivate them. Management agreements have a duration of three years, and may be renewed for an additional period of ten years, upon positive evaluation of the community's performance by the administration (Law No. 96-025, articles 1–5; and Decree No. 2000-027).

Along similar lines, in Mongolia, the law recognizes the rights of citizens to be organized in **user groups** ("*nukhurlul*"), to conserve specific natural resources within their community boundaries and to use those resources in a sustainable manner. The state, its organizations and their officials may delegate their responsibility for conservation, use, and possession of specific natural resources to such user groups through contracts, including rights to participate in decision-making regarding forest protection and control and prevent illegal activities therein (Environmental Protection Law, articles 3(2)(8), 4(1)(6) and 19(2)(7)).

Agreements may also be used as the basis for the creation of community-based wildlife management initiatives. In Ethiopia, communities may be authorized to administer wildlife habitats under agreements with regions, and regulations should determine mechanisms to share the profits derived from the utilization of wildlife resources between federal government and regions and to benefit communities. Although very general, this provision seems to prevent communities from directly obtaining the profits of wildlife management activities they may undertake, as it assumes that any profits are to be shared between central and regional governments, which are in turn to decide how to benefit communities with any such profits (Proclamation Wildlife Areas and Authority, articles 7 and 10).

In Viet nam, the management boards of national parks or natural reserves may lease forest areas to organizations and individuals for eco-tourism development. Such schemes of forest **lease** must be publicized among local communities, so as to encourage their participation in eco-tourism activities, and not exceed 50 years' duration (2007 Regulation on Management of Ecotourism Activities in National Parks and Nature Reserves). Yet another option is used in Namibia to include community representatives in state-owned companies that directly manage wildlife resorts (Namibia Wildlife Resorts Corporation Act, section 4). Thus, the Namibia Wildlife Resorts Company is to carry on the business of managing wildlife resorts, promoting training and research with a view to increasing productivity in the wildlife resorts service and developing, with or without the participation of the private sector, commercially viable enterprises or wildlife projects. The board of this company has been required to include two members representing community-based organizations since 2006 (Cirelli and Morgera, 2009a).

Sometimes the framework for community-based management seems to be limited to **private or communal land**, while the state retains full control over areas of state land. Where the extent and location of state land allow it, it would be useful to promote wildlife management initiatives by local communities on state land, by offering the possibility of entering into secure management arrangements similar to those described above, especially where there is potential for community involvement in wildlife management and related subsistence or commercial opportunities. Some countries, such as Burkina Faso (Forest Code, article 99), limit the possibility to undertake community-based wildlife management to **customary land**.

In Zimbabwe, originally the Parks and Wildlife Act (adopted in 1975) granted ownership of wildlife resources and wildlife management rights only to the owners or occupiers of alienated land (excluding communal land). The success of management initiatives on alienated land prompted a 1982 amendment to grant wildlife management rights to communal land farmers. However, these farmers did not have formal claim to the land, so ownership and management responsibilities were given to district councils rather than directly to customary holders. Any rural district council which demonstrated a commitment to the local level management of wildlife could be given the same use rights to wildlife as enjoyed by private landowners. This was the basis for the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE). In 1988, district councils were empowered to adopt by-laws addressing natural resource management. This was perceived

as a re-empowerment of local communities and significantly improved the means of implementation of CAMPFIRE (Cirelli and Morgera, 2009a).

Certain provisions may also specifically target **species-specific** community-based management options. This is also the case of community-based vicuña live-shearing operations in Bolivia that, subject to specific regulations, receive the full income derived from the sale of vicuña fibre. Only local communities – no outside private parties – may register a live vicuña-shearing operation, thereby receiving "in custody" vicuñas found on each community's recognized territories, according to population studies on the abundance of species. Communities are then allowed to develop their plans and activities in collaboration with private parties or NGOs. Discussions reportedly took place in 2009 regarding the government's intention to impose a tax on such profits, as currently only 10 percent of the proceeds from selling of vicuña fibre go to national or provincial authorities (Aguilar and Morgera, 2009), which then must channel the funds to the monitoring and control of live-shearing operations (Supreme Decree on the Mechanism for Vicuña Fibre Commercialization, article 18).

Peru also has a tailor-made government program and regulations for vicuñas – the Vicuña Law (1995) – based on the Vicuña Convention and CITES, which includes specific requirements to allow the selling of vicuña fibre, establishes sanctions for hunting and recognizes indigenous and farmers' communities as the owners of this natural resource. The law sets out a common entity, the National Society of Vicuña Breeders of Peru (SNV), to represent those communities, as the sole institution authorized to develop activities linked to rational handling and commercialization. The vicuña farmers' communities were organized in communal committees, which make up the nine regional associations representing those farmers in the SNV. These Andean communities capture vicuñas communally by surrounding them and herding them towards a funnel-shaped mesh. The process, called *chakku*, draws on methods practiced by the Incas. Once in the funnel, vicuñas are taken one by one, shorn and then released (Lichtenstein *et al.*, 2002).

No matter the type of arrangement in place, legislators should ensure that these initiatives do not exclude certain groups or members of groups from such opportunities. In Uganda, applications for the grant of wildlife management rights are subject to **specific requirements** and rules of evaluation that require consideration of the position of neighbouring landowners or occupiers. A specific provision aims at facilitating equitable

access to resources by different members of communities: where the applicant for a wildlife use right is a community or part of it, the community must supply a statement explaining how the community has been made aware of the proposal and specifying the role and proposed functions of the body which will manage the activity for which the application is submitted (Wildlife Act, sections 32–40).

Legislators should also ensure that a clear and fair set of grounds is determined for the **suspension of termination** of community-based wildlife management arrangements, with the possibility to be brought back into compliance and/or to appeal against negative decisions. In Namibia, if the relevant minister wishes to withdraw a community-based management arrangement, the committee must be notified the reasons and be given a period to object (Wildlife Ordinance, section 24A). In Madagascar, approval of management agreements may be withdrawn if the community fails to comply with the obligations set out in the agreement. The community may be compensated if it cannot fully enjoy the rights set out in the agreement due to the administration, or in the case of unilateral termination of the contract by the administration. Appeals to the higher administrative authority are allowed in the latter case. Appeals to the courts are allowed only in cases of rejection or if such an administrative appeal is not possible. Disputes may also be settled by arbitration (Law No. 96-025, articles 39–48). In Uganda, detailed provisions address the case of non-compliance with the grant of wildlife management rights (with possible issue of "compliance notices", and "stop notices", the latter being for immediate suspension of activities during the time given to comply with the former) and revocation, if the authority considers it necessary, following investigation of performance or upon reliable information, or as a result of a natural disaster or for any other relevant reason (Wildlife Act, sections 34–40).

Overall, the applicable legal framework to community-based wildlife management initiatives should result from basic provisions included in the law and more detailed ones spelt out in specific arrangements between the administration and the concerned communities. Some flexibility in the contents of these arrangements is desirable which will allow parties to negotiate the respective rights and obligations in a realistic way. The conditions set out in the law, however, should provide a sound basis for the arrangements, aiming to protect both the interests of sustainable wildlife management and the interests of communities with regard to subsistence and enjoyment of products derived from their efforts and resources. The absence

of a sound legal basis would undermine the security of such arrangements altogether and consequently the livelihood of rural people. The law should therefore detail the matters to be addressed in the agreements, requiring provisions regarding duration, respective rights and obligations (payments due, sharing of benefits, assistance to be provided) and consequences for violations by either party.

Box 6-7: Legal options for community-based wildlife management

- Adopt measures that aim toward delegating rights, accompanied by responsibilities and guarantees of accountability of those who use and manage resources, taking into account local custom, traditions and customary laws;
- in the event that management dictates a reduction in harvest levels, to the extent practicable require the provision of assistance to local stakeholders, including indigenous and local communities, who are directly dependent on the resource to have access to alternatives;
- provide training and extension services to enhance the capacity of local communities to enter into effective decision-making arrangements as well as in implementation of sustainable use methods;
- ensure that arrangements for community-based wildlife management have appropriate duration to provide long-term interest in the durability of the resource and opportunities to recoup investment;
- establish a legal preference for local community members – as opposed to outside private companies – to manage wildlife. Such a preference is justified in light of their different interests, capacities and potential role for sustainable wildlife management. In this case, such preference should be spelt out by:
 - attaching priority to local communities in the tender process for allocating wildlife management concessions (on the basis of geographical limitations and requirement for actual residency in areas with or adjacent to hunting grounds) and providing for more favourable concession conditions (for example, termination of the concession will only be justified when more than one violation of its conditions has taken place, rather than at the first occurrence);

- encouraging community-based arrangements where tender procedures have failed to find interested managers, by providing even more favourable conditions to interested groups of local residents. The administration could provide necessary technical assistance and support to these collaborative wildlife management efforts;
- in establishing a different legal instrument specifically targeting community-based wildlife management (management agreements, for example), spell out the basic elements of these instruments, as well as a transparent and equitable process for their negotiation on a case by case basis, such as:
 - when the administration proposes to create a community-managed area, require the administration to adequately publicize its proposal;
 - require that any persons living in the area or having strong traditional ties to it get a fair opportunity to join the community-managed area;
 - set out selection criteria for the case in which more than one group or community may be interested in arrangements concerning the same land;
 - require verification from the members of the group or community applying to manage natural resources that their representatives have been appropriately designated and are serving as effective channels of communication for the group; provide for replacement of representatives who cannot or do not fulfil their duties; require clear assent from community members about respective rights and obligations and sharing of benefits;
 - require verification of the ability and willingness of the group or community to undertake the relevant activities as well as to manage funds;
 - require consultation with various concerned actors, including central and local government, neighbouring communities, traditional authorities, and others as may be appropriate;
 - require verification of the suitability of the area for the proposed activities, and the practicality of the proposed activities generally;
 - require the government to consider existing rights of occupancy or use and either accommodate them into the arrangement, upon agreement of right holders, or compensate the right holders for their loss; where rights are in dispute, provide a mechanism for promptly resolving the competing claims;

- direct the administration and the group or community to adopt an agreement setting out respective rights and obligations (including a simple management plan based on an inventory of resources and setting out activities to be undertaken, prohibitions, payments due, assistance to be provided, duration, applicable conditions, etc.);
- give the group or community power to issue its own binding rules regarding the activity being undertaken, including rules on land access and use by the group and by third parties;
- set out powers and duties for enforcement of any relevant applicable rules within the concerned area, including where appropriate enforcement by members of the group;
- give the group or community clear rights of ownership or rights to dispose of produce resulting from the initiatives being undertaken, waiving unnecessary requirements (e.g. permit requirements) that would be otherwise applicable under general law;
- set out consequences for violations (grounds for suspension and termination, compensation), and provide an opportunity for communities to remedy to the non-compliance within a certain deadline before termination of their right;
- create procedures for effective settlement of disputes that arise during the tenure of the arrangement;
- require the administration to provide information, training, advice and management and extension, upon request of the community;
- permit accruing benefits, while leaving some flexibility to communities on their management and use;
- clarify monitoring and reporting requirements, and possibilities for communities to protect their resources from external interference;
- set clear conditions for the suspension or termination of the agreement with the possibility for the community to return to compliance or to appeal against an unfavourable decision by the administration.

6.8 Ensure sustainable management of wildlife by the private sector

In addition to requirements for authorizations for single wildlife-related activities, such as hunting or ecotourism, some laws include rules regarding wildlife management by private parties other than indigenous communities. Where management responsibilities and some (to a certain extent exclusive) use of land are granted, usually by the state to third parties, the arrangement

is frequently referred to as a concession – a term, however, whose meaning may vary in different countries. Concessions are used for longer-term rights over a certain area and the wildlife resources that can be found there. Laws generally set out main conditions (duration, ownership of animals introduced by the concessionaire, etc.) and refer to agreements for further specifications. The concession holder needs a reasonably long term to recoup investments made in developing the concession. On the other hand, the laws should ensure that the government can exercise control over the concession holder's performance.

In Congo, hunting areas or wildlife reserves may be leased to private persons for hunting purposes, subject to a "management contract", following a public invitation to submit offers. A yearly fee calculated as a percentage of the hunting quota allocated to the area applies. Respective rights and obligations of the parties to the contract are to be further determined in a *cabier de charges* (technical agreement) attached to the management contract (Wildlife Law, articles 59–61). In Madagascar, hunting rights on state lands may be granted to third parties, who may presumably be private entrepreneurs or communities, by a lease agreement or by public auction under a *cabier de charges* setting out requirements which may include repopulation of certain species or hunting rules (Hunting Ordinance, article 13). In Uganda, the administration may enter into commercial arrangements with any person for the management of a protected area, the provision of services or infrastructure in a protected area or the management of a species or a class of species of animals or plants. Persons entering into such agreements must submit a management plan (Wildlife Act, section 15).

Whether or not "concessions" are addressed in the law, other possible initiatives by the private sector are generally required to be authorized, even where they take place on a person's own land. In Botswana, "private game reserves" may be created by presidential declaration upon a request by the landowner. In these reserves hunting or capturing of all or specified species is either prohibited or allowed only by the landowner or persons authorized by him/her and subject to conditions specified in the declaration establishing the reserve (Wildlife Conservation and National Parks Act, section 13). In Gabon, the National Parks Agency may hand over management of national parks for tourist purposes to a private party under a concession agreement, "after examining a technical *dossier*" (National Parks Law, article 22).

Private initiatives for wildlife management may be restricted by law only to certain groups or institutions. In Mali, recognized **hunters associations** – a status that may be obtained by contributing to wildlife management and enforcement – may organize hunting and tourism within their territory and may obtain a lease for this purpose (Decree No. 97-052/P-RM, articles 92–93).

Hunting guides may also have access to opportunities to manage wildlife. In Gabon, the organization of hunting activities in a specified area may be allocated to a hunting guide, following an auctioning process. The guide must ensure compliance with the law by his/her staff and clients and is responsible for damage caused by them and must be insured to cover such possible damage (Forestry Code, article 203). In Cameroon, hunting guides may be handed the right to exploit a hunting area, subject to a *cahier de charges* (Wildlife Decree, article 51). In Mali, hunting areas, wildlife reserves and special reserves may also be leased to hunting guides or hunting tourism companies. The beneficiary of the lease obtains an exclusive right to the resources of the area, subject to the lease contract and a *cahier de charges*. Applications must include an undertaking to invest a specified amount in the area (Forest Code, articles 153–159).

Failure to adopt a transparent and fully accountable **process for the allocation** of hunting concessions in government or communal land areas inevitably invites allegations of corruption, cronyism or mismanagement. In addition, one should consider that the length of time that individual hunting concessions are held and the security associated with such tenure has a direct bearing on the amount operators are willing to invest in the protection of the concession and the sustainable use of wildlife. Long-term tenure commitments should be encouraged to promote maximum investment in the resource base and local communities, as long as satisfactory performance can be demonstrated on an ongoing basis.

Overall, for both concessions and licensing the law may want to establish standards to ensure operators are financially and technically qualified. Typical standards include:

- Whether the applicant has violated hunting laws in the past. The law may limit this to major violations, intentional violations, recent violations or even multiple violations.
- Whether the applicant has the basic knowledge to carry out the task. An applicant's knowledge might have to cover species identification, hunting laws, weapons safety, first aid and related matters. A

concession holder may need to demonstrate sufficient knowledge of wildlife science to conduct monitoring, identify problems requiring active response such as famine or disease, create plans, and determine quota levels. Standards might be different for indigenous groups, assumed to have local knowledge, and outsiders.

- Whether the applicant has the financial capacity to carry out the task. This might be a matter of having insurance, or it might require posting of a bond.

Linked to the screening criteria is the question of whether concessions can be transferred. The law should specifically address this point, and in case it allows such transfers, it would be wise to request prior governmental approval to ensure that the new operator also complies with minimum criteria comparable to the screening ones. If the law issues concessions to corporations, both the screening and the transfer issues become more complex. A corporation that is qualified when a concession is issued may lose capacity when its staff changes. A person who has repeatedly violated hunting laws may try to hide behind a dummy corporation, or a foreign interest may try to get around local ownership laws by setting up a domestic front corporation. If these are serious concerns, the law may have to go into detail disqualifying individuals and groups from even indirect participation in organized hunting.

To ensure that a transparent system of allocation of wildlife management rights is in place, it may be necessary to include specific provisions applicable to the wildlife sector in wildlife legislation, rather than relying on general legislation governing public contracts. In addition, the law should provide for public participation in the screening of applications for wildlife management rights and in the monitoring of awarded concessions or contracts.

A fair and transparent system of allocation of wildlife-related concessions and contracts, which can bring about improved conservation as well as increase business opportunities for the whole society, can directly or indirectly empower the poor. The law can assign local communities representatives priority in the allocation of concessions, if specific community-based management arrangements are unavailable in a specific jurisdiction or are insufficient to allow effective involvement of local populations in wildlife management. A word of caution should however be added: this may open the door for communities to become false fronts for private businesses seeking unfair advantage in concessions. To prevent this,

legislation should require the community to disclose existing commitments regarding the resource and to have some oversight or outside review before entering into new commitments. Some oversight over the incidental commercial deals that the community enters into, and transparency about income and spending should also be provided for.

In few cases, such as Ghana (Timber Resources Management Act, as amended in 2002, article 14A) and Congo (2008 Wildlife Law, article 69), the law refers to the possibility of devising **fiscal incentives** for wildlife management. This is generally a good approach, although of course the effectiveness of such instruments towards the involvement of the private sector remains to be assessed against numerous factors such as actual financial advantages gained from the incentives and efficiency of the tax law enforcement system.

In the US, the Stewardship Contracting Programme provides incentives for government land managers to take on management projects in partnership with local communities to benefit wildlife habitat, forest health and other land stewardship goals. The incentive for the government land manager is a relaxation of some of the usual strict procurement rules and the retention of any income from the activity, which the manager can set aside to fund other habitat conservation projects in the area, including projects on private lands that improve the overall environmental value of adjoining public lands (16 USC 2104 Note).

In most cases, **regulatory details** governing management tend to be minimal and sometimes require strengthening or the adoption of implementing texts. The Central African Republic may grant private persons rights to build and manage tourist infrastructure and to organize tours. The law calls for a model technical agreement to set out applicable conditions. The government may thus simply allocate "hunting sectors" to private parties under concessions for hunting or wildlife-watching tourism, in accordance with a contract and a model *cahier de charges*, or may reserve the hunting sectors for national and resident hunters (Wildlife Ordinance, articles 69–71). In Ethiopia, private investors "may be authorized to administer" wildlife conservation areas, whether established by the central or the regional governments, by entering into concession agreements with the government or the concerned region (Wildlife Proclamation, article 6). In Cameroon, requirements are also not numerous: the government may declare hunting areas on state forest and

either use them directly or lease them out (in this case, subject to a *cabier de charges*) (Decree No. 95-466/PM, article 92).

Certain provisions can require private-sector applicants for concessions or contracts to address **social needs** of the poor. These provisions can require consultation with affected local people to identify needs that should most urgently be addressed. In Burkina Faso, private natural or legal persons may hold concessions for partial wildlife reserves, local refuges or ranches, allowing the persons exclusive commercial use of the resource. Concessionaires must comply with a technical agreement and formulate a management plan to be approved by the local wildlife administration. The *cabier de charges* must specify the concessionaire's obligations, including those regarding exploitation, protection and infrastructure, as well as principles regarding relations between the concessionaire and local population (Forest Code, articles 153–157). In Mali, lease contract over hunting areas, wildlife reserves and special reserves leased to hunting guides or hunting tourism companies must specify the advantages granted to neighbouring populations (Law on the Management of Wild Fauna and its Habitats, article 57).

An adequate legal framework for private concessions can help rural people by creating an environment conducive to employment and business opportunities and/or by requiring private entrepreneurs to provide direct benefits to the local communities. In some countries, the involvement of the private sector is envisaged and promoted **within the context of community-based wildlife management initiatives**. In Burkina Faso, for example, exploitation of the village hunting areas may involve commercial objectives, and may be managed under concessions by technically capable persons. The relevant minister may issue invitations to submit proposals for concessions, for an annual fee established by the minister responsible for wildlife and the minister responsible for finance, for 5 to 10 years' duration. Concessions are subject to conditions set out in the document establishing their creation, in the concession contract, *cabier de charges*, and wildlife legislation in force (Forest Code, articles 99–102 and Decree No. 2008-312, article 15). In Kenya, community forest associations may enter into partnerships with other persons to ensure sustainable forest management (Forest Act, article 47). The opposite case (involvement of community in the context of private wildlife management initiatives) can also be conceived. Legislation should leave options open for these various arrangements to be set up and adequately regulated.

In all cases in which some management rights are handed over to private parties by the administration, contractual agreements may be an appropriate means to set out all necessary details, taking into account the specificities of the case, as long as the law provides a sound legal basis for such agreements, safeguarding both the interests of sustainable wildlife management and the interests of private entrepreneurs to act in a secure business environment. Many of the laws examined seem to have reduced relevant requirements to a minimum, and are thus not adequately designed to prevent loose arrangements, which are likely to be unfair to the disadvantaged people of society. This is especially true in countries where contractual arrangements in general do not tend to be adequately fair and secure. If the legal system allows it, the wildlife law should provide specific rules concerning agreements, for example, addressing alternative dispute settlement mechanisms outside of ordinary courts of law. Where the award of public contracts tends to be unfair, separate procedures ensuring transparency could be introduced. The law should also set out minimum required contents of concessions and other private wildlife management contracts, making it compulsory to address duration, respective rights and obligations (including "social" obligations of concessionaires, payments due, sharing of benefits, assistance to be provided) and consequences for violations by either party.

Box 6-8: Legal options for involving the private sector in sustainable wildlife use

- Develop a transparent mechanism for the allocation of hunting concessions (for the right to manage hunting resources/areas);
- require broad consultations, including central and local government, neighbouring communities and traditional authorities, as may be appropriate, to consider possible impacts of hunting concession allocations on the livelihoods of communities living in or near hunting areas, and on traditional use of wildlife or other interested stakeholders, to avoid future conflicts;
- require that the allocation of hunting concessions should respect wildlife management plans;
- require verification of the suitability of the area (whether private or state land) and availability of resources for the proposed activities;

- require adequate advertisement of opportunities;
- set out criteria to make a selection among possible competitors: they should include technical and financial qualifications, demonstrable management capacity, past performance, as well as where appropriate a technical and financial offer, foreclosing on any potential for "back door" arrangements or deals that end up rewarding individuals rather than government and/or communal stakeholders;
- provide for training courses;
- include specific provisions to ensure transparency of selection procedures (e.g., publication of results with reasons for the action taken);
- require that existing rights of occupancy or use over the concerned area must be considered and either accommodated into the arrangement, upon agreement of right holders, or if extinguished, compensated; if review of rights turns up conflicting claims, provide for a prompt and fair way to settle the conflict;
- ensure that an equitable share of the benefits remain with the local people in those cases where foreign investment is involved, by giving preference to those investors who undertake to involve and benefit local people to the largest possible extent. Then require that proposed "social" obligations of applicants become binding conditions in the contract entered into with the investor;
- require an agreement setting out respective rights and obligations of the parties, including, where appropriate,
 - a management plan based on an inventory of resources and setting out activities to be undertaken or prohibited, or a requirement to prepare inventories and submit a management plan for government review; requirements to periodically update inventories and management plans; and a requirement to prepare annual operations plans detailing management activities and expected intensity of hunting;
 - safeguards to ensure conservation of the species and area used (e.g. preventing habitat conversion or settlement in the hunting area). So for example, a trophy hunting concession may also carry with it the creation of development restrictions and a requirement that concessionaires provide personnel to monitor and enforce such restrictions;
 - specification of duration, to be appropriate for the type of activity and investments expected;

- exclusivity if granted;
- social obligations of the private entity, preferably following consultation with concerned stakeholders;
- sharing of benefits and payments due;
- all other applicable conditions (such as an obligation to monitor the status of wildlife, and report back to authorities periodically);
- assign the private entity clear rights of ownership or rights to dispose of produce resulting from the initiatives being undertaken, waiving unnecessary requirements (e.g. permit requirements) that would be otherwise applicable under general law;
- set out consequences for violations (grounds for suspension and termination of the concession, compensation), with the possibility to remedy to the first or minor instance of non-compliance within a certain deadline;
- make provision for monitoring of compliance with the agreement by the administration as well as by the public;
- put in place procedures for effective settlement of disputes;
- allow the concession holder to withdraw due to unanticipated changes in circumstances, such as fire, disease, or other disaster destroying the value of the concession.

7. IMPLEMENTATION AND LAW ENFORCEMENT

Sometimes lack of law enforcement is why resource management initiatives fail. The law thus must adequately address enforcement needs. On the other hand, more often than might be assumed, legal frameworks address in detail (perhaps too much detail) enforcement issues. Even short laws grant specific and sufficient powers of investigation and arrest and set out relatively long lists of prohibitions for which penalties apply. Some laws allow agencies to keep fines as a source of income for seriously under-funded programs and staff, creating an incentive to enforce. While enforcement is a problem in many countries, legislation itself cannot as automatically be criticized for not making enforcement a priority. What may be improved, however, is coupling a repressive approach with certain positive incentives to compliance.

These final sections thus look at the primary elements that can help significantly improve the implementation and enforcement of wildlife legislation, focusing not only on a repressive approach, but also on an incentive-based one. They address legal tools to build incentives to comply with the law, to ensure financial resources for wildlife management (including through wildlife funds), to strike a balance between service provision and law enforcement mechanisms, to monitor harvests and trade, and to address human-wildlife conflicts.

7.1 Providing incentives for complying with the law

The Addis Ababa Principles and Guidelines, in accordance with the ecosystem approach,¹⁰⁹ stress that laws and regulations that distort markets can contribute to habitat degradation or otherwise generate perverse incentives that undermine conservation and sustainable use of wildlife and of biodiversity more generally. Against this background, the Addis Ababa Principles and Guidelines call for the identification, removal or mitigation of these perverse incentives.¹¹⁰ By the same token, the Biodiversity Convention draws attention to the benefits of positive incentives, which should be economically and socially sound (article 11). The SADC Protocol on Wildlife Conservation and Law Enforcement also addresses the use of incentives to promote wildlife conservation (chapter 1).

Providing the basis for incentives in legislation is generally a good approach, although incentive design can be challenging. The effectiveness of any incentive will depend on many factors outside of wildlife administration or even government. For example, a tax incentive's success may depend on the implementation and enforcement of the country's tax system, and an eco-tourism subsidy might be useless if the world economy flattens the tourism market.

Incentives can reward actions or omissions. For example, according to Angolan draft legislation, local communities should receive incentives for abstaining from activities undermining the objectives of the protected areas. The same draft wildlife law also calls for incentives to support repopulation of wild animals, which should be ensured by the government in degraded areas

¹⁰⁹ CBD Decision VII/11, Annex, principle 4.

¹¹⁰ Addis Ababa Principles and Guidelines, practical principle 3.

and in areas in which wild animals populations were reduced, or may be significantly reduced, as a result of economic activities.

Incentives can aim at primary management or at value-added products. In Madagascar, the law allows the government to grant fiscal incentives to communities involved in natural resource management, to facilitate the sustainable production of goods derived from wildlife. The community may request technical assistance from the administration (Law No. 96-025, articles 54–55).

The most basic incentives, however, aim directly at resource management. In Mozambique, the National Council for Sustainable Development is expected to propose financial incentives related to the management of natural resources (Environmental Law, article 6). The Russian Federation law allows economic incentives to encourage proper management and protection of wildlife (e.g. tax privileges and other preferential terms accorded to legal entities and citizens ensuring protection, reproduction and sustainable use of wildlife, or concession to legal entities of preferential credits to carry out arrangements for the protection and reproduction of wildlife). The functioning of such system of economic incentives is to be ensured by special legislation (Wildlife Law, article 54). Similarly, in Uzbekistan, general environmental law envisages the use of economic incentives, such as the granting of taxation privileges for the implementation of measures to ensure rational use of natural resources, or the granting of "credits" (loans) for the implementation of measures to ensure rational use of natural resources (Law on Nature Protection, article 37). These incentives are also provided for the protection and rational use of wildlife in particular, including through the granting of taxation-related and other privileges to legal and physical persons who comply with protection requirements (Law on Fauna, article 13).

Conversely, legislation could grant some **privileges**, such as exemptions from rules applicable to the utilization of wild animals. Exemptions from general rules should reflect the purposes or details of the activity. For example, privileges could apply to food production or economic development for rural communities. Angolan draft legislation provides incentives for wildlife ranching activities that contribute to food security and calls upon wildlife ranchers to take into account the implications of their activities on neighbouring communities in terms of availability of meat (see section 6.3 above).

In China, citizens have the duty to protect wildlife resources and the right to inform the authorities of, or file charges against, acts of seizure or destruction of wildlife resources. Entities and individuals that have made outstanding achievements in wildlife protection, research, domestication and breeding must be rewarded by the state. Such outstanding conduct includes contribution to wildlife protection and rescue, scientific research, implementation and enforcement, or working for five years or more on the protection and maintenance of wildlife in a grassroots organization, or to the establishment and management of nature reserves and the related scientific research (Wildlife Protection Law, article 4).

In the US, in the framework of the Habitat Conservation Plan programme under the Endangered Species Act, a landowner with a listed species on his land can simply obey the "no takings" provisions of the Endangered Species Act and do nothing. However if the landowner prepares a suitable habitat conservation plan to benefit the listed species, gets approval, and implements the plan, the land owner gets two potential benefits: (1) an incidental take permit that will forgive the incidental taking of a limited number of the animals; and (2) a "no surprises" guarantee, which says that the government will not revoke the habitat conservation plan or insist on new provisions due to changed circumstances (50 CFR 17.22). The Endangered Species Act further allows the government to offer rewards to citizens who provide useful information to enforcement officials (16 USC 1540).

It should be noted in this context that over-regulating of wildlife conservation and use may act as a disincentive, especially where bureaucratic procedures are burdensome and licences cannot be easily obtained. In Latin America, for instance, a reliance on general bans on commercial wildlife use and/or expensive or cumbersome licensing procedures may have created perverse incentives for local communities and individuals to sell products in unregulated "black markets", or most simply to switch to alternative – sometimes less sustainable – land uses such as agriculture or forestry (Aguilar and Morgera, 2009). Finally, improving the legal framework recognizing use and management rights and strengthening the security of these arrangements, ensuring appropriate duration of these arrangements, can also *per se* create long-term incentives in the sustainable management of the resource, and rewards (such as automatic renewal of these arrangements) for sustained good management practices (see sections 6.7 and 6.8 above).

Box 7-1: Legal options for providing incentives to comply with the law

- Identify and eliminate perverse incentives (economic mechanisms, subsidies) that have a negative impact on the potential sustainability of wildlife uses;
- provide economic incentives (such as tax exemptions, lower loan interest rates, certifications for accessing new markets) for wildlife managers, users and local communities that invest in developing or that engage in more efficient, ethical and humane use of wildlife resources and that reduce collateral damage to biodiversity;
- provide recognition of sustainable wildlife management by private individuals or undertakings;
- provide for free-of-charge technical cooperation to communities that are willing to assist in ensuring wildlife law compliance.

Source: partly inspired by the Addis Ababa Principles and Guidelines, practical principles 10–11.

7.2 Returning financial resources to improved wildlife management

Addis Ababa Practical Principle 13 states: "[t]he costs of management and conservation of biological diversity should be internalized within the area of management and reflected in the distribution of the benefits from the use." The management and conservation of natural resources incur costs. If these costs are not adequately covered then management will decline and the amount and value of the natural resources may also decline. To maintain essential management, some of the benefits from use should flow back to the local natural resource management authorities.

Recreational and trophy hunting may have positive impacts, including increasing revenues for wildlife conservation and rural development, decreased poaching and conservation of habitat for species. Because the species has and generates recognizable value, managing authorities, local communities and projects may be able to implement real conservation efforts, which often incidentally benefit non-trophy species as well.

But there are also examples where the accounting loop associated with recreational/trophy hunting returns no funds to the management of the

resource and, in the worst case, puts money in the pockets of a few wealthy individuals, has no positive effect on wildlife management or habitat conservation, and in the end represents one more extractive use of a dwindling resource with potentially serious consequences. Seldom does legislation specifically address this topic, although a basis in primary legislation is necessary to earmark certain resources from the general budget to wildlife management.

On a practical level, there are at least two ways a government itself can recover the costs of wildlife management – either through direct payments in the form of a license, permit, or other fee (i.e., a one time payment by the user for a specific use)¹¹¹ or through indirect payments typically in the form of taxes for particular types of uses.¹¹² Another, additional option is that of transferring management responsibilities to stakeholders, so that the costs of wildlife management will be partly sustained by stakeholders rather than by the government alone (see section 6.7 above).

Hunters often pay license fees to the managing authority. However, budgeting laws may require the authority to turn this revenue over to a central budget for redistribution. Some policymakers argue that the managers should be able to keep the fees, as an incentive to good management. Some countries actually go a step further and turn hunting area management over to concessionaires, who as private operators can keep the admission fees or trophy fees that they charge hunters (see section 6.8 above).

However, adopting this kind of incentive can have unintended consequences. First, the existence of a special income source may influence the way budget-makers distribute the government budget. Knowing that the managers expect a certain income from fees, the budget-makers may simply reduce government support to the managers by the expected amount. If the fee income grows in succeeding years, the budget-makers will cut government support further, cancelling the net benefit and effective incentive. Second, fee-based funding may make initial management

¹¹¹ Licenses and permits are sometimes (not always) "direct payments" paid by the user to the managing authority and retained by that authority to cover costs. For example, an entrance fee paid to and used by a national park is a direct payment.

¹¹² Taxes constitute "indirect payments" paid to a national treasury and from their distributed to managing authorities. These may include the application of a general percentage of all taxes paid for natural resource-related management activities or taxes for specific uses (e.g., taxes for resource use such as a stumpage tax for timber harvests).

investments difficult. The start-up costs for the creation of wildlife management system will typically exceed initial revenues. Third, the fees may create too strong an incentive to manage for income-generating species, to the detriment of biodiversity, fuelwood production, water quality, or other potential outputs of the land. Worse, managers will be tempted to set harvest quotas according to the economic needs and not scientific monitoring results. Fourth, the fee system may trap income, dedicating it to wildlife management when the needs of the local people call for a broader set of programs. For example, rather than spend all the income on hiring guards and building fences, the local community might be better off if some of the income supported development of local businesses, to diversify the economy and the demographics of income earners. Fifth, fee revenue may rise and fall based on the broader economy. Thus, it may not provide a predictable stream of revenue for long-term projects.

The law can help prevent some of these consequences. For example, strong laws requiring scientific justification for quotas can help keep management science-based (see section 6.5.2 above), and laws requiring management plans (chapter 3) to support of a broad range of land uses and values can counter the tendency to focus on income-producing species.

To deal with the issues of unpredictable income and lack of start-up money, legislation can set up dedicated **funds** to manage financial resources allocated to wildlife management. These funds can set aside some public revenues, possibly wildlife revenues as well as other sources, and also contributions from the general treasury or donors, and permanently devote them to wildlife management. Where countries have set up these kinds of funds, in the majority of cases, the funds support broader fields of environmental protection and sustainable forest management, rather than wildlife specifically. The creation of a fund nonetheless by itself is no guarantee of financial support for wildlife; the resources available in the fund often depend on government's willingness to support the sector, overall financial governance and ability to secure assistance from donors. Funds may in any case be useful instruments for the management of money actually allocated to the wildlife sector, particularly if the supporting law creates **transparency and accountability** of the fund's use. If the underlying law encourages use of the fund for combined social and ecological betterment, a fund can play a significant role in providing benefits to the poor, for example by supporting community-based initiatives.

Funds that are specific to wildlife (**wildlife funds**) can be found in Cameroon, which has a Special Fund for the Management of Wildlife Conservation Areas (Forestry, Wildlife and Fisheries Law, article 105). Along the same lines, Kenya has a Wildlife Service Fund to finance wildlife conservation and management projects, as may be determined by the Board of Trustees (Wildlife Conservation and Management Act, article 5). In Malawi, a fund is specifically devoted to conservation purposes, namely the promotion and management of national parks and wildlife reserves (Forestry Act, section 103). Costa Rica and Guatemala have wildlife funds that administer the proceeds of wildlife fees charged for authorizations, permits and licences (Costa Rica Wildlife Conservation Law, article 11; Guatemala Hunting Law, articles 17–18, respectively) to finance ordinary administration costs of implementing wildlife legislation or capacity building for the administration.

Alternatively, **environmental funds or forestry funds** may have specific wildlife management objectives. Mauritius has established several funds that directly and indirectly provide for the conservation of wildlife (namely, a National Parks and Conservation Fund, the National Environment Fund, and the National Heritage Fund – the last fund finances safeguard of habitat of animals considered to be of outstanding value). Belize's Protected Areas Conservation Trust, funded by a conservation fee per protected area visitor and a 20 percent commission from cruise ship passenger fees, not only funds research projects regarding national park management, assessment programmes for freshwater fish, and sustainable management for Mayan regions,¹¹³ but also allows to buy land to further its goal of promoting the natural and cultural resources of Belize and maintaining biodiversity (Protected Areas Conservation Trust Act, section 16).

Another interesting case is that of Ecuador, where a fund collects all proceeds from tourist entry fees to the Galápagos Island to be used for the conservation of this unique ecosystem (Special Galápagos Province Law, article 11). In addition, the Ecuadorian forest fund may provide financing to wildlife management, with resources obtained from the concession for tourism licenses in protected areas or hunting licenses in continental Ecuador (Forestry Law, articles 75–77). In the US, the Land and Water Conservation Fund Act (16 USC 4601 – 4601-11) funnels a share of revenue

¹¹³ See www.pactbelize.org.

from off-shore oil and gas leases into a fund for acquisition of lands for public recreation and wildlife habitat, including endangered species habitat.

Mexico's private Fund for Protected Natural Areas does not receive income from protected area management, but is supported by donations from public sources and international cooperation. The Fund supports the implementation of basic activities within protected areas including zoning, awareness-raising, and protection and monitoring of key species. The fund does not support projects, hence small community projects within these areas obtain funding from other sources (Aguilar and Morgera, 2009). Similarly, Peru's Fund for Protected Areas administers funds from donations and international cooperation for the support of Peru's protected areas system.¹¹⁴

Legislation ought to ensure that funds have **transparent governance** structures, but often does not. For instance, in Congo, the committee of the environmental protection fund is made up only of representatives of various ministries, thus not including non-governmental stakeholders (Decree No. 99–149, article 2). Conversely, the Board of Trustees of Swaziland's Environmental Fund must have two members from non-governmental organizations that promote the conservation of the environment (Environmental Management Act, article 24). The Namibian Game Products Trust Fund Act was amended in 2006 to require the representation of community-based organizations involved in sustainable wildlife resource management projects on the fund's board (section 5). In Belize, the Protected Area Conservation Trust Act also spells out transparent and participatory governance system for a fund collecting a conservation fee per visitor and a 20 percent commission from cruise ship passenger fees: it establishes a trust to conserve biodiversity and promotes the natural and cultural resources of Belize (explicitly including fauna), involving non-governmental stakeholders on the Board of Directors. Among the eleven members, there must be one representative from a community-based organization chosen by the Environment Minister (article 4). This thus represents a minimal approach to ensuring transparency in the governance of funds, as a broader representation and bottom-up selection of community representatives in the board would be more empowering for indigenous and local communities.

¹¹⁴ See www.profonanpe.org.pe.

It is impossible from an examination of the legal provisions alone to determine the actual effectiveness of these funds. Some provisions, however, seem to be better equipped than others to support the more needy sectors of society in accessing possible financial resources. Relevant provisions rarely include **communities among the beneficiaries** of funds to support their initiatives regarding wildlife. One case is Mauritius' National Environment Fund, for which legislation specifies that resources may be utilized to support non-governmental organizations engaged in environment protection and to encourage local environmental initiatives (Environment Protection Act, articles 60–62). In Belize, the Protected Areas Conservation Trust clearly indicates among the potential beneficiaries registered management organizations of protected areas, non-governmental organizations, community-based organizations, and governmental agencies that are involved in the conservation and management for sustainable use of Belize's natural resources (Protected Area Conservation Trust Act, section 35). Support of community-based environmental management programmes is an express objective of Tanzania Mainland's National Environmental Trust Fund (Environmental Management Act, section 214). These provisions could be further strengthened by requiring adequate advertising of any available opportunities especially among rural communities, which would in turn contribute to the transparency throughout the process of operation of the funds. The law or the funds' operational rules could also permit some funding to be made available to assist communities, particularly disadvantaged people, in the formulation of proposals to be funded. The funding would assist those disadvantaged persons that would otherwise be unlikely to independently submit a proposal.

As an alternative or in addition to the creation of a fund, national legislation may also provide **generic clauses** seeking to ensure that appropriate funding is earmarked for wildlife management. In Bolivia, the law stipulates that management of protected areas will be financed with resources obtained, among others, from income generated by the areas, which may not be utilized for other purposes. It also states that income from tourism activities in protected areas must be used to fund the management of these areas (Protected Areas General Regulation, articles 5 and 111). In Mexico, revenue received from the issuing of licences, authorizations and permits in protected areas is channelled towards preservation and restoration activities within the areas that generated the resources (Ecological Balance Law, article 75 *bis*). Chile finances wildlife management in protected areas, at least in part, from the proceeds of non-extractive uses of wildlife, including the sale of

tickets to visitors and concessions granted within these areas. Resources obtained by the national forest authority may be used solely for the purposes of administering and controlling protected areas, and its budget is independent from that of the Ministry of Agriculture (Protected Areas Law, article 11).

In the US, the Migratory Bird Hunting and Conservation Stamp Act (16 USC 718–718j), first passed in 1934, requires waterfowl hunters to purchase and carry an annual migratory bird stamp. The government can use the income from the stamps only to buy or lease migratory bird habitat. The Wetlands Loan Act of 1961 (16 USC 715k-3–715k-5) lets the government borrow money for habitat acquisition, to be repaid from future migratory bird stamp sales. The Federal Aid in Wildlife Restoration Act (16 USC 669–669i), first passed in 1937, takes money from federal taxes on hunting weapons to provide grants for state and local wildlife management research; the selection, restoration, rehabilitation and improvement of wildlife habitat; and public education related to hunting. In addition, the National Fish and Wildlife Foundation Establishment Act, 1984, created a national foundation to manage donations for the conservation and management of fish, wildlife, and plants and undertake activities to further the conservation and management of wildlife for future generations (16 USC 3702). The foundation is governed by a board of directors, comprised of twenty-five members, appointed by the Secretary of the Interior (16 USC 3702). At least six directors must be educated or experienced in fish, wildlife, or other natural resource conservation; at least four must be educated or experienced in the principles of fish, wildlife, or other natural resource management; and at least four must be educated or experienced in ocean and coastal resource conservation (16 USC 3702). The foundation may also enter into cooperative agreements with private landowners to provide substantial long-term benefits for the restoration or enhancement of fish, wildlife, plants, and other natural resources on private land (16 USC 3703).

Appropriately designed legal provisions regarding the operation of a fund or other ways to earmark financial resources to wildlife management can ensure that the fund helps to empower the poor. Without language directing the uses of the fund to this end and requiring adequate and transparent management procedures, however, arbitrary spending and even fraud can prevent disadvantaged people from receiving benefits. Ideally, legislation should clearly indicate that local communities are among the beneficiaries of financial resources reinvested into wildlife management and that local communities' involvement in wildlife management should be one of the

main objectives (or even a priority) of these resources. In addition, legislation should provide for technical and other assistance for disadvantaged people to submit proposals to have access to these resources. Furthermore, financial resources may be specifically earmarked or utilized to facilitate an equitable participation among men and women in wildlife management (see section 3.7 above). Finally, ensuring public participation in the management of financial resources, or at least provision for clear procedures for public intervention in decision-making regarding use of the resources, could further contribute to empowering the poor.

Box 7-2: Legal options for returning financial resources to improved wildlife management

- Provide guidelines for wildlife managers to calculate and report the real cost of management in their plans;
- create "earmark" provisions that require a return of at least equivalent sums to those earned through wildlife management to the managing authority for wildlife management;
- do not require that wildlife management "pays for itself." This is rarely possible;
- where wildlife/environmental funds exist, provide for:
 - clear indication that local communities are among the beneficiaries of funds for wildlife management and that local communities' involvement in wildlife management should be an objective of these funds;
 - obligations for authorities to provide for technical and other assistance for disadvantaged people to submit proposals to these funds;
 - the possibility for funds to be specifically earmarked or utilized to facilitate an equitable participation among men and women in wildlife management;
 - transparency and public participation in the management structures of funds, or at least provision for clear procedures for public intervention in decision-making or monitoring regarding use of the funds.

7.3 Striking a balance between service provision and law enforcement mechanisms

Sometimes laws fail to provide a detailed picture of the powers and duties of public officers in charge of wildlife law enforcement. As a result of this approach, enforcement officers operate in a situation of uncertainty, which hinders their effectiveness and undermines their legitimacy in the eyes of wildlife users. Officers should be, for example, provided with sufficient powers to apprehend, detain and prosecute alleged offenders, seize allegedly illegal products, undertake routine inspections on vehicles transporting wildlife products, and suspend allegedly illegal operations. All these **powers** should be exercised in an overarching framework of fairness, as the legitimacy of officials depends on the extent to which the public views them as embodying the honest and equitable rule of law.

Concentration and abuse of power is another concern. If the same individual or office writes the rules, apprehends violators, and compounds offences, without any practical opportunity for accountability or outside review, that situation invites abuse. Similar abuse of power can occur if concessionaires have enforcement authority. Liberia, for instance, experienced so many concessionaire abuses during its recent civil war that the new forest law bans concessionaires from using armed guards.

Too great a legal fixation on enforcement, however, combined with a failure of public authorities to provide a recognizable service to resource users, makes management more difficult. Law enforcement officials are often perceived as intent on fining violations to supplement income, rather than deterring violators. In the extreme, law enforcement officials may often wait for a violation to occur just to be able to collect the fine. The impact on management is a generalized resistance by locals to all management efforts, not just enforcement. To strike a balance, legal provisions need to be included that address not only what types of actions will result in fines and penalties for civilians, but also the repercussions on officials for failure to provide promised services. This relates to issues of transparency and accountability.

Coordination can also be an issue. In situations in which different authorities play a role in law enforcement – when for example hunting guards are also involved with inspection, while there are other public officers dealing with forest inspection, animal health inspection, and environmental

inspection – there should be cooperation between hunting inspectors and other institutions. Where the wildlife officials can arrest people but only prosecutors or judges can bring people to trial, the wildlife and the criminal laws need to fit together, and drafters should probably consult with general law enforcement authorities to understand their concerns.

Besides regulating the powers of law enforcers, wildlife legislation should also set appropriate sanctions for violations. **Sanctions** should be severe enough to act as a deterrent (resulting in a major increase in the cost of doing business for those who violate the law), but not too severe or out of proportion to the nature of the offence so that courts and other enforcement bodies may be reluctant to apply the penalty at all, allowing the crime to go unpunished. The law may also tie the amount of sanctions to the gravity of the violation and the severity of the damage caused (thus possibly including compensation for damage to the public good, and confiscation of illegal produce and equipment). Sanctions should always be consistent with relevant legislation. To ensure the continued relevance of sanctions over time, the law may provide for flexibility in setting the amount of sanctions, for example by defining classes of sanctions in the law while leaving amounts to be defined by subsidiary legislation. Here we are also referring to the penalties and procedures that come into play in the event of a violation of the law. Some wildlife laws have provisions for civil or administrative penalties. Typically, civil penalties are less harsh than criminal penalties. They never involve imprisonment. Civil violations are also easier for the government to prove: they do not require proof of intent, and the standard of proof is preponderance of the evidence. In contrast, criminal defendants begin with a presumption of innocence, which the government must overcome with evidence of guilt beyond a reasonable doubt.¹¹⁵

Regardless of the resource in question, small fines neither act as a deterrent nor provide compensation and quickly become a simple cost of doing business. For enforcement to have meaning, the fines applied must be sufficient to deter and compensate from year to year. Sometimes withdrawal of permits or licenses can be a powerful sanction, and the threat of such action is as effective deterrent to violations. Sometimes it is too powerful. For example, to a wildlife guide, losing his/her license means not being able to work. A guide is unlikely to want to risk that loss. However, the law must

¹¹⁵ This section draws, *mutatis mutandis*, from Vapnek, J. and Spreij, M. 2005, *Perspectives and guidelines on food legislation, with a new model food law*, FAO Legislative Study 87.

be able to guarantee that such a strong sanction is never applied arbitrarily, or threatened as a means to extort bribes. Another powerful pair of sanctions is the cancellation of concessions or grants and the loss of the right to bid for future concessions or grants. The law might reserve these sanctions to those convicted of wildlife crimes.

Furthermore, offences and sanctions should be coupled with provisions on mitigation, remediation, compensation and rehabilitation¹¹⁶ where damage is caused to wildlife, to their habitat or to other components of the environment, as a result of violations of wildlife law and when biodiversity loss results from over-use. Natural resource damage provisions of the US oil spill and hazardous waste law, for instance, tie damages to the cost of restoration. Under these laws, the US, the Indian tribes, and the states serve as trustees of natural resources, which include wildlife. If any are damaged by the release of hazardous waste or an oil spill, anyone who generated, transported, arranged for disposal of, or disposed of the waste, along with the owner of the land where the release occurred, is strictly liable for the injury and can be sued by the trustees. There is no need to prove intent, negligence, or even causation. The measure of damages is the cost of restoration or replacement of the resources, not their market value. Liability among the various potential defendants is joint and several.

In Australia, the Environmental Protection and Biodiversity Conservation Act includes a broad range of enforcement mechanisms for managing suspected or identified instances of non-compliance and for reviewing the compliance of referred projects, including:

- the relevant minister may direct that an environmental audit be carried out if he or she has reasonable grounds to believe that a person has contravened or is likely to contravene an environmental approval or permit issued under the act;
- civil or criminal penalties can apply to individuals and corporations that contravene the requirements for environmental approvals under the act, including the provision of false or misleading information to obtain approval;
- remediation orders and determinations can be issued to repair or mitigate environmental damage resulting from a contravention of the act;

¹¹⁶ Introduction to the Addis Ababa Principles and Guidelines.

- enforceable undertakings can be used to negotiate civil penalties and provide for future compliance (sections 14A and B, 486DA and DB).

A person charged with a civil violation also has a right to trial. Laws often grant a person charged with a civil violation a less formal option. Sometimes that is an appeal to the enforcing officer's superior. Sometimes it is an administrative hearing before a hearings officer, typically one who works for the agency but is not a guard or field officer. A person unhappy with an administrative ruling can appeal the decision to a regular court.

Legal provisions on law enforcement often allow for **public participation** in the detection and prevention of violations of wildlife legislation, with the purpose of involving and at the same time holding accountable local communities and the private sector. To this end, environmental or wildlife legislation may create a general obligation for all members of society to inform public authorities of violations of the law, or may call upon users specifically to do so (as is the case of local management councils and licence holders, according to Mozambique's Wildlife Law, article 37). In addition, general legal provisions that may grant part of fines or other incentives to those members of the public that contributed to the prevention or detection of wildlife legislation violations may also serve to significantly support the law enforcement efforts of public authorities and contribute to empowering local communities and other users. In Mozambique, in fact, all citizens, and in particular the local management councils and licence holders, are to collaborate in monitoring for the protection of wildlife and notify the nearest authority of any violation of wildlife law (Wildlife Law, article 37). The wildlife regulation allocates 50 percent of the fines for violations of forest and wildlife law to the law enforcement officers and community agents that contributed to the detection of the violation, and to the local communities or individual citizens that denounced the violation. Wildlife law enforcement officers benefit from a subsidy for risk corresponding to 20 percent of the basic salary (articles 112–113).

In Zimbabwe, members of environment committees and the Environment Board may enter land to make **investigations** regarding animals, giving notice to the occupier or owner. Another provision to strengthen enforcement allows persons who are in the process of hunting, in compliance with the law, to ask any other hunter to produce evidence of his authority to hunt. Environment committees may serve notice on the "appropriate authority" for a land within their area (which may be a private

land owner), proposing to recommend to the Environment Management Board that measures be taken to restrict hunting. It may also temporarily prohibit the hunting of specified animals for fourteen days (Environmental Management Act, sections 78, 70 and 79).

In Mongolia, **environmental NGOs** may supervise and inspect the implementation of environmental legislation and demand compensation for breaches of environmental legislation. The government may delegate special functions to such NGOs and will then have to fund their implementation (Environmental Protection Law, article 32). In the Philippines, volunteers from NGOs, citizen groups and community organizations may participate in wildlife enforcement (Wildlife Act, section 30).

In Turkey, local people and village councils are authorized to protect wildlife resources, to notify law enforcement agencies of any illegal hunting activities and to assist such agencies in the fight against poachers (Hunting Law, article 20). In Uzbekistan, citizens and public associations in the field of wildlife management must "execute public control". They must be trained in wildlife protection and may bring claims for compensation of damage to wildlife and its habitat (Law on Fauna, article 5).

Public participation in law enforcement is also frequently achieved through the creation or recognition of **honorary wildlife inspectors** (as in Burkina Faso, Ghana, Sudan and Kenya). Usually these inspectors are required to submit a yearly report to the wildlife management authority. In Mali, hunters associations may obtain recognition as public service associations if they contribute to law compliance and fight against poaching: this recognition qualifies them to offer recreational hunting and wildlife-watching tours (Wildlife Law, articles 93–94). Along similar lines, in Costa Rica, the Environment Minister may appoint members of civil society to Natural Resource Control Committees, which are involved in wildlife law enforcement (Wildlife Conservation Law, article 15). In Chile, *ad honorem* inspectors to assist in wildlife law enforcement authorities can be civil society organizations, including wildlife breeders associations, hunting clubs, associations for the protection of animals, and environmental institutions. Their tasks include requiring hunters to show their permits and identification, and presenting claims to relevant authorities for violations or crimes found during the exercise of their tasks (Wildlife Conservation Law, article 15). In Malaysia, the director of the Sabah Wildlife Department may appoint suitable persons to be honorary wildlife wardens, to assist with

implementation, and may license suitable persons to be wildlife guides (Wildlife Protection Act, sections 3–4). Similarly, within the Forest Department of Sarawak the "controller" may, with the minister's approval, constitute a special wildlife committee, headed by a warden, and consisting of rangers, honorary wildlife rangers and residents selected by the controller, to assist him with the management of a wildlife sanctuary (Sarawak Wildlife Protection Ordinance, article 9).

Both in Angola (Draft Wildlife Law, article 32) and Mozambique (Environmental Law, article 30), the law calls for the creation of **community law enforcement officers** who have a right to receive part of the penalties for violations detected within their area of surveillance. Similar arrangements are optional in Tanzania, as found in the framework of community forest management agreements (Forest Resources Management and Conservation Act, section 44). Along the same lines, in Zimbabwe, members of environment committees and the environment board may enter land to make investigations regarding animals, after giving notice to the occupier or owner. In addition, hunters may ask any other hunter to produce evidence of his right to hunt (Parks and Wildlife Act, sections 70 and 78). In Malawi, village natural resource management committees have the power to enforce their own rules by seizing produce taken in case of their violation (Forestry Act, sections 30–31).

Generally, wildlife legislation does not often provide rewards or other **incentives** for public participation in law enforcement. In Gabon, however, the administration may appoint "*lieutenants de chasse*" as volunteer guards who may participate in enforcing the law, by taking direct action in case a violation is committed, or alternatively to report to the administration. They carry out their functions free of charge, but are entitled to the same rewards envisaged for enforcement officials for the offences they report (Forest Code, article 201; Decree 186/PR/MEFCR, articles 3–5). Another exception is Swaziland, where game rangers and park wardens who provide information that leads to the arrest and conviction of a person who has violated the Game Act will receive an award, the amount of which is determined by the minister (Game (Amendment) Act, article 29).

Overall, encouraging participation in law enforcement and providing incentives may contribute to empowering the poor, by recognizing the role of local and indigenous communities as guardians of the resources, and of allowing them to enjoy firsthand the benefits derived from the rule of law.

Box 7-3: Legal options for striking a balance between service provision and law enforcement mechanism

- Clearly set out those conducts that can be considered an offence and that cannot be effectively punished by means other than sanctions (for instance, withdrawal of permits, licences, etc.);
- evaluate the penalties with the following questions in mind:
 - are proposed fines able to: (1) act as a strong disincentive for the targeted behaviour, and (2) compensate the state for the damage caused? In this respect, legislation should clarify whether compensation would be additional to the payment of fines;
 - is there an opportunity for timely and easy modification of penalties to take into account the effects of inflation? If not, include indexing provisions in the law, to allow for the automatic updating of penalties rather than requiring legislative action for every penalty increase;
 - is there opportunity to give consideration to the severity of the damage done in determining the penalty? In addition to fixing a flat penalty for a specific offence, also require the offender to reimburse government for the cost of damages done to wildlife;
- evaluate the procedures by which laws are enforced by:
 - providing expedited procedures for minor offences, thus, on the one hand, helping ensure that a case does not simply get lost in the backlog of lower court cases, while on the other hand freeing up courts to focus on more severe breaches of the law. The difficulties and delays associated with public prosecutions can, in many cases, discourage wildlife officers from pressing forward with a case;
 - providing for compounding minor offences, that is, the payment of a prescribed fine as a way of disposing of uncontested cases without the need to pursue full prosecution;
 - providing for the possibility of resolving cases outside of the court system, through administrative tribunals or alternative dispute resolution mechanisms;
- clearly set out the powers of inspectors, providing for certain limits to their discretion as well as for certain duties;
- expressly require that inspectors have proper qualifications;
- ensure cooperation (exchange of information, joint inspections, etc.) among law enforcement institutions;

- limit possible conflicts of interest by prohibiting that the same entity mixes commercial activities and public functions related to ensuring sustainable management and law compliance either at the central or at the local level;
- establish repercussions for public officers in wildlife law, by:
 - identifying the types of services described in the law;
 - determining which types of disincentives will act both as a deterrent to the targeted behaviour and as a means of correcting the failed service or harm caused;
- provide for opportunities for the public, and in particular for local and indigenous communities to participate in wildlife enforcement;
- provide incentives for members of the public to contribute to law enforcement, by allocating a portion of fines applied to poaching to local community members that contribute to detect and stop illegal activities.

7.4 Monitoring harvests and trade

Beyond licensing (see section 6.5.6 above), the most commonly used and accepted tool for monitoring harvests and trade involves the "**tagging**" of harvested wildlife. Under this system, the license or permit purchased by the hunter must be dated when an animal is harvested in a manner that cannot be changed (typically by cutting out the month and day) and is "attached" to the animal immediately upon harvest like a tag. A failure to tag the animal is a violation equivalent to poaching whether or not the hunter has purchased a license. The act of "tagging" results in the use of the license in a manner that prevents reuse of the same license at a later date. This is the case in the state of Montana (Montana Statutes 87-2-509) in the US, where the tag becomes the transport permit for the carcass. Some states issue the hunting license and the tag separately. An example is Oregon, which issues a general hunting license and then issues tags for specific species of wildlife (Oregon Revised Statutes 497.112).

Tagging may be useful because it requires the use of the license and because it immediately becomes a monitoring and enforcement tool – whether or not inspected. It is not, however, a perfect system. Problems associated with it include prohibitive implementation costs; compliance difficulties due to a lack of distribution or inability to travel to distribution centres by hunters;

and corruption, where tags become another form of currency sold to the highest bidder at the local level and are no longer available for the intended groups.

The other common system in use is **self-reporting**. With self-reporting, the law requires that hunters write in harvest values on a specialized form when hunting and produce the form to inspectors upon request. The form is not attached to the animal and therefore does not serve the same function as a "tag." The system is often unused or abused by hunters who write in pencil and later erase if they are not inspected. If inspections are rare, the risks of cheating are negligible rendering the system essentially ineffective.

In Kenya, holders of game licences must keep a **register** of the prescribed particulars of every game animal killed, wounded or captured. Animals killed or captured under a game licence or trophies obtained there from must be produced within 30 days to a warden who must issue a certificate of ownership. In Gabon, holders of small-scale and large-scale hunting permits must register partly protected animals that have been hunted and other details. In Sudan, license holders should keep records of animals killed or captured.

All hunters are required to register details of animals hunted in their *carnet* in Congo, where documentation required to obtain a hunting permit is listed and includes previous carnets duly filled out, a weapon permit and proof of insurance (Decree No. 85/879, article 7). Similarly, in the Democratic Republic of Congo, animals hunted must be recorded in a hunter's *carnet*, with relevant details, within 48 hours (Order No. 014/CAB/MIN/ENV/ 2004, article 28).

In Angola, according to draft hunting regulations, licensed hunters are expected to file an **annual report** of their activities, including technical information on the density and levels of populations, their movements and migrations, as well as suggestions as to the measures necessary to enhance conservation, protection and control of wildlife use. In Botswana, landowners or other specified lawful occupiers hold the right to hunt non-protected animals without a licence, on their land, subject to certain restrictions. In the exercise of such privileges, the landholder must maintain and submit annually a record specifying sex, species, place and date of hunting (Wildlife Conservation and National Parks Act, section 22). In Madagascar, holders of commercial hunting authorizations must report the number and species of animals hunted every three months (Hunting Ordinance, article 19).

Overall, to be more effective, self-reporting requirements need to be linked to users' participation in decision-making and management planning, so as to nurture a sense of ownership of wildlife management decisions.

Box 7-4: Legal options for monitoring harvests and trade

- Use self-reporting requirements, with a view to make hunters, hunters' associations and other wildlife users more accountable, by:
 - making filing of the previous term's report a condition of reissuing a license;
 - requiring reports to be filled in with ink or other permanent marker;
 - making guides responsible for filing reports for their non-resident clients;
 - establishing links between self-reporting and participation in decision-making and management planning;
- include a tagging system in the law, requiring as a minimum that:
 - the appropriate agency is empowered to create hunting tags that must be validated in such a way that they cannot be reused (this requirement typically applies only to big game species and does not include fish or birds, unless particularly rare);
 - the properly validated tag remain with the meat until consumed;
 - tag remain attached to the hide of any game animal harvested for its skin until the hide has been tanned; and
 - all shippers of wildlife, or its parts, label all packages offered for shipment by whatever means including specifications for the description of the contents.

8. CONCLUSIONS

Wildlife law can contribute to the legal empowerment of the poor to varying extents. Carefully drafted legal provisions can grant rural people clear and secure rights to conserve and use sustainably wildlife and benefit from it. The law can support the traditional practices and livelihoods of local and indigenous communities, who are among the most disadvantaged sectors of society. The law can recognize and even favour traditional use, as long as it is sustainable. It can require government officials to factor the needs of local

and indigenous communities in wildlife management planning and management. It can guarantee that certain wildlife meat is given to local communities for their food security. More progressively, legislation can allocate economic and other benefits from wildlife activities to local and indigenous communities, or reserve management rights and income generated through such management to them (particularly through community-based wildlife management schemes).

The contribution of wildlife legislation to the empowerment of the poor depends on several factors:

- the clarity and security of rights granted to communities;
- the creation of policy- and decision-making processes that are open to community participation and are transparent;
- the accountability of public authorities and users;
- the adoption of an incentive-based rather than simply punitive legal system;
- the possibility to review periodically policy, legislation and management plans in light of lessons learnt;
- the ultimate willingness to give a stake to local and indigenous communities in sustainable wildlife management.

The law should thus require genuine efforts to achieve early and informed consultation with indigenous and local communities, as well as other relevant stakeholders, in wildlife policy- and law-making, management planning and permitting. Along the same lines, the law should provide opportunities for public involvement in the selection and establishment of wildlife sanctuaries, in the listing of protected species and in the siting of breeding or hunting areas. These are often considered purely technical matters whose impacts on local livelihoods could easily be disregarded. Inclusion of communities' concerns should be legally mandated in assessing impacts on the environment and wildlife, planning wildlife management, negotiating contracts for wildlife use and devising ways to address or prevent human-wildlife conflicts. To facilitate public participation, the system of planning and decision-making should be transparent. Key documents should be available in local languages, and where necessary, under-served communities should have access to technical assistance to participate.

The law should create clear standards for actions of public officials and should provide mechanisms to hold them accountable for their actions.

These may include opportunities for stakeholders to appeal decisions to superior officials within the wildlife management agency or to the courts. Mediators could also be called upon to prevent and resolve disputes related to wildlife management in a more decentralized and cost-effective way.

The rural poor should have opportunities to benefit from the development of the wildlife resource within the rule of law. The benefits may be in the form of employment, by collaborating and being rewarded for participation in monitoring and law enforcement as honorary guards, park rangers, or hunting and ecotourism guides. Benefits may also be in the form of ownership rights or payments for outside use of the resource. They may be in the form of reduced human-wildlife conflict. The overall effect of the law should be to encourage compliance by incentives as much as by punishment.

To that end, legal drafters themselves must reach out to local stakeholders and consult with them about legal reforms. While undertaking these consultations, legal drafters (as well as wildlife managers) should bear in mind that wildlife conservation and sustainable use, in particular when hunting is concerned, are a highly sensitive and often culturally charged topic, and current regulations may be based on past inequities, corruption or mismanagement. Difficulties may also arise from the level of economic benefits that can be derived from wildlife use – which may be negligible in terms of contribution to the national GDP, but may be very significant in a local context.

Finally, the use of scientific information as a basis for decision-making may be challenging, taking into account the need to adopt an ecosystem-based and precautionary approach, as well as to the contributions of traditional knowledge. The law should embrace adaptive management. Managers, including communities, should feel empowered to experiment, but at the same time responsible for ongoing monitoring and evaluation, with a view to reviewing regularly plans to ensure better management. The goals of revision should be social improvement as well as ecological improvement of wildlife management. The programme of sustainable development should include the advancement and empowerment of local people along with the environmental sustainability of wildlife management.

Legal options presented in this paper may provide a useful starting point for discussions on improving wildlife legislation for environmental sustainability and the empowerment of the poor, but should be analysed in the context of

a country's capacities, needs and challenges. Putting in place a workable legal framework to this end is crucial, but in the end is just a first step in a process of good governance, effective implementation and learning – which depends on many other factors besides well-crafted legislation. Flexibility should ultimately be retained to allow for adapting to increased understanding of scientific, socio-economic and cultural aspects of wildlife management and to evolving international standards.

BIBLIOGRAPHY

Literature

Aguilar, S. & Morgera, E. 2009. *Wildlife law and the legal empowerment of the poor in Latin America*. FAO Legal Paper Online No. 80 (available at www.fao.org/legal).

Birnie, P. & Boyle, A. 2002. *International Law and the Environment*. Oxford University Press, Oxford, United Kingdom.

Boudreaux, K. 2008. A new call of the wild: community based natural resource management in Namibia. *Georgetown International Environmental Law Review* 20: 297–335

Cirelli, M.T. 2002. *Legal trends in wildlife management*, FAO Legislative Study No. 74. Rome, Italy (also available at www.fao.org/legal).

Cirelli, M.T. & Morgera, E. 2009a. *Wildlife law and the legal empowerment of the poor in Sub-Saharan Africa*. FAO Legal Paper Online No. 77 (available at www.fao.org/legal).

Cirelli, M.T. & Morgera, E. 2009b. Wildlife law and the legal empowerment of the poor in Sub-saharan Africa: additional case studies. FAO Legal Paper Online No. 79 (available at www.fao.org/legal).

Commission on Legal Empowerment of the Poor. 2008a. *Making the law work for everyone*. Vol. I. Commission on Legal Empowerment of the Poor and United Nations Development Programme.

Commission on Legal Empowerment of the Poor. 2008b. *Making the law work for everyone*. Vol. II. Commission on Legal Empowerment of the Poor and United Nations Development Programme.

CONAF. 2008. *Gerencia de Áreas Protegidas y Medio Ambiente*. Diffusion paper No. 23, October 2008.

Doumbé-Billé, S. 2001. *Droit international de la faune et des aires protégées: importance et implications pour l'Afrique*. FAO Legal Paper Online 20 (available at www.fao.org/legal).

Echeverria, J.D. and Lurman, J. 2003. The Endangered Species Act: Thirty Years of Politics, Money, and Science: 'Perfectly Astounding' Public Rights: Wildlife Protection and the Takings Clause. *Tulane Environmental Law Journal* 16: 331–385.

FAO. 2002. *Law and sustainable development since Rio - legal trends in agriculture and natural resource management*. FAO Legislative Study No 73. Rome, Italy (also available at www.fao.org/legal).

FAO. 2008. *Traditional rights and practices in forest and wildlife resource management in Angola* (unpublished). Angola.

Fox, J., Bushley, B., Dutt, S. & Quazi, S. 2007. *Making conservation work: linking rural livelihoods and protected area management in Bangladesh*. East-West Center, Bangladesh. Nishorgo Program of the Bangladesh Forest Department.

Fox, J., Bushley, B., Miles, W. & Quazi, S. 2008. *Connecting communities and conservation: collaborative management of protected areas in Bangladesh*. East-West Center, Bangladesh. Nishorgo Program of the Bangladesh Forest Department.

Goldstein, G. 2005. Legal systems and wildlife conservation: history and the law's effect on indigenous people and community conservation in Tanzania. *Georgetown Int'l Environmental Law Review*, 17: 481–516.

Goodman, E. 2000. Protecting Habitat for Off-Reservation Tribal Hunting and Fishing Rights: Tribal Co-Management as a Reserved Right. *Environmental Law* 30: 279–359.

Hasler, R. (undated). *The institutional paradox of community based wildlife management*. Report under the Project for Land and Agrarian Studies, University of the Western Cape, Bellville, South Africa.

Hossain, A.A. 2008. Constraints in policy and legislation with respect to the performance of co-management initiatives at Chunati wildlife sanctuary. In Fox, J., Bushley, R., Miles, B. & Quazi, S. *Connecting communities and conservation: collaborative management of protected areas in Bangladesh*, pp. 25–48. Nishorgo Program of the Bangladesh Forest Department, East-West Center, Bangladesh.

Hulick, A.B. 2006. Habitat Conservation Plans: Protecting Species, Enhancing Democratic Legitimacy and Promoting Stewardship are not Mutually Exclusive Goals. *UCLA Journal of Environmental Law and Policy* 25: 441–471

Hyakumura, K., Inoue, M., Martinus, N., Harada, K. & Komatsu, K. 2004. *Lao PDR country report 2003: Towards participatory forest management in Lao PDR*. IGES, Japan.

Khamphay Manivong & Phouthone Sopthathilath. 2007. *Status of Community Based Forest Management in Lao PDR*. National Agriculture and Forestry Research Institute (NAFRI), Ministry of Agriculture and Forestry. Vientiane, Lao PDR.

Knight, C. 2007. The system of wildlife management and conservation in Japan, with particular reference to the Asiatic black bear. *New Zealand Journal of Asian Studies* 9: 62–79.

Konate, A. 2001. *Tendances d'évolution du droit de la faune et des aires protégées en Afrique Centrale*. FAO Legal Paper Online No. 21 (available at www.fao.org/legal).

Lamarque, F., Anderson, J., Chardonnet, P., Fergusson, R., Lagrange, M., Osei-Owusu, Y., Bakker, L., Belemsobgo, U., Beytell, B., Boulet, H., Soto, B. & Tabi, Tako-Eta, P. 2008. *Human-wildlife conflict in Africa: an overview of causes, consequences and management strategies*. (unpublished report but can be found as a presentation to the African Forestry and Wildlife Commission, 18–21 February 2008, Khartoum, Sudan).

Larson, A.M., Cronkleton, P., Barry, D. & Pacheco, P. 2008. *Tenure rights and beyond: community access to forest resources in Latin America*. Occasional Paper No. 50. CIFOR, Bogor, Indonesia.

Lichtenstein, G., Oribe, F., Grieg-Gran M. & Mazzucchelli S. 2002. *Manejo Comunitario de Vicuñas en Perú. Estudio de caso del manejo comunitario de vida silvestre*. IIED. London, UK.

Ly, I. 2001. *Tendances d'évolution du droit de la faune et des aires protégées en Afrique Occidentale*, FAO Legal Paper Online No. 13 (available at www.fao.org/legal).

Marín Durán G. and Morgera, E. 2006. Towards Environmental Integration in EC External Relations? A Comparative Analysis of Selected Association Agreements. *Yearbook of European Environmental Law* 6: 179–210.

Mbotiji, J. 2002. *Sustainable use of wildlife resources: The bushmeat crisis*. FAO Wildlife Management Working Paper 5. Rome, Italy.

Morgera, E., Fodella, A. & Wingard, J. 2008. *Developing sustainable wildlife management laws in Central and Western Asia*. FAO/CIC. Budapest, Hungary.

Morgera, E. & Wingard, J. 2008. *Principles for developing sustainable wildlife management laws*. FAO Legal Paper Online No. 75 (available at www.fao.org/legal).

Muir-Leresche, K. & Nelson, R. H. 2000. *Private property rights to wildlife: The Southern African experiment*. International Centre for Economic Research Working Paper, No. 2-2000.

Nasi, R., Brown, D., Wilkie, D., Bennett, E., Tutin, C., van Tol, G. & Christophersen, T. 2008. *Conservation and use of wildlife-based resources: the bushmeat crisis*. Technical Series No. 33. Convention on Biological Diversity, Montreal, Canada and CIFOR, Bogor, Indonesia.

Rahman, L.M. (undated) Policy, law and administration for protected area management in Bangladesh. *Nishorgo: Protected Area Management Program of Bangladesh*, Nishorgo support project.

Regional Biodiversity Strategy for the Tropical Andean Countries. 2002. *Estrategia Regional de Biodiversidad para los Países del Trópico Andino*. Comunidad Andina de Naciones Decision 523.

Scholtz W. 2005. Animal culling: A sustainable approach for anthropocentric atrocity? Issues of biodiversity and custodial sovereignty. *Macquarie Journal of International and Comparative Environmental Law* 2: 9–30.

Shelton, D. 2009. A rights-based approach to conservation. In Greiger, T. (ed.) *Conservation with Justice: A Rights-based approach*. IUCN Environmental Policy and Law Paper No. 71. Gland, Switzerland.

Sigmon, M.R. 2004. Hunting and Posting on Private Land in America. *Duke Law Journal* 54: 549–585.

Swiderska, K., Roe, D., Siegele, L. & Grieg-Gran, M. 2008. *The governance of nature and the nature of governance: policy that works for biodiversity and livelihoods*. IIED. UK.

Toledo, V. M. 2003. Los pueblos indígenas, actores estratégicos para el corredor biológico mesoamericano. *BioDiversitas* 47: 8–14.

Tsioumani, E. and Morgera E. 2010. *Wildlife law and the legal empowerment of the poor in South-East Asia and Oceania*. FAO Legal Paper Online No. 83 (available at www.fao.org/legal).

UN Forum on Indigenous Issues. 2010. World's Indigenous Peoples' Report (available at: www.un.org).

UN Secretary General. 2009. Legal empowerment of the poor and eradication of poverty (Report), UN Doc. A/64/133.

Vapnek, J. 2010. *Regulatory measures against outbreaks of highly pathogenic avian influenza*, FAO Legal Paper Online No. 82 (available at www.fao.org/legal).

Wang, A. 2007. The role of law in environmental protection in China: recent developments. *Vermont Journal of Environmental Law* 8: 195–223.

Watters, L. & Wang Xi. 2002. The protection of wildlife and endangered species and China. *Georgetown Int'l Environmental Law Review* 14: 489–524.

Wijnstekers W. (undated), *The Evolution of CITES*, (8th ed.) (available at www.cites.org).

Wilcox, W.A. Jr. 2001. Access to Environmental Information in the United States and the United Kingdom. *Loyola of Los Angeles International & Comparative Law Review* 23: 121–186.

Wingard, J. Lindsay, J. & Manaljav, Z. 2005. *Improving the Legal Framework for Participatory Forestry: Issues and Options for Mongolia with reference to International Trends*. FAO Legal Paper Online No. 46. (available at www.fao.org/legal).

LEGISLATION REVIEWED

ANGOLA

Lei Constitucional da República de Angola, No. 21/91, 1991, as amended by Law No. 23/92, 1992

Decree ruling on the Protection of Land, Flora and Fauna, No. 40.040, 1955
Regulamento de Caça, Dip.Leg. No. 2873, 1957, as amended by Dip.Leg. No. 86/72, 1972

Regulamento Florestal, No. 44531, 1962

Lei de Bases do Ambiente, No. 5/98, 1998

Anteprojecto de Lei de Florestas, Fauna Selvagem e Áreas de Conservação, 2006

Decreto sobre a Avaliação de Impacte Ambiental, No. 51/04, 2004

Proposta de Regulamento de Caça, 2008

Proposta de Regulamento Peral das Areas de Conservação, 2008

ARGENTINA

Constitution, 1994

Decree on Strict Natural Reserves, No. 2148/90, 1990

General Environment Law, No. 25675, 2002

National Parks Law (as amended), No. 22351, 2002

Resolution on Hunting and Trade Ban, Secretary of Environment and Sustainable Development (SADS) Resolution No. 513/2007, 2007

Regulation for Constructions in National Parks, Parks Administration (APN) Resolution No. 241, 2007

Resolution on Hunting Trophies, Secretary of Environment and Sustainable Development (SADS) Resolution No. 1828/2007, 2007

Wildlife Decree No. 666/1997, 1997

Wildlife Law, No. 22421, 1981

ARMENIA

Constitution, 1995

Foundations for Legislation on Nature Protection of the Republic of Armenia (Law), 1991, as amended in 1996

Law on Specially Protected Natural Areas, 2006

Law on Fauna, 2002

Law on Hunting and Hunting Economy, 2007

Land Code, 2001

Forest Code, 2005

Law on Environmental Impact Assessment, 1995

Law on Nature Protection and Nature Utilization Payments, 1998

AUSTRALIA

Constitution, 1900

Environment Protection and Biodiversity Conservation Act, 1999

Environment Protection and Biodiversity Conservation Regulations, 2000

Environmental Reform (Consequential Provisions) Act, 1999

Wildlife Protection (Regulation of Exports and Imports) Act, 1982

Wildlife Protection (Regulation on Exports and Imports) Regulations, 1984

Native Title Act, 1993

Intergovernmental Agreement on the Environment, 1992

BANGLADESH

Constitution, 1972 as amended

Wildlife Preservation Order, No. 23, 1973, as amended by the Wildlife (Preservation) (Amendment) Act, No. XVII, 1974

Environment Conservation Act, No. 1, 1995

Environment Conservation Rules, 1997

Biodiversity and Community Knowledge Protection Act, 1998

The Environment Court Act, 2000

BELIZE

Constitution, 1981, as consolidated in 2008

Cockscomb Basin (Closed Area for Hunting) Regulations, 1984, as consolidated in 2003

Environmental Impact Assessment Regulations, 1995, as consolidated in 2003

Environmental Protection Act, 1992, as amended in 2000

Forests Act 1927, as revised in 2000

Forests (Protection of Mangroves) Regulations, 1989, as amended in 1992

Forest Rules, 1973, as consolidated in 2003

Land Utilization Act, No. 16, 1981, as consolidated in 2000

Land Utilization (Monkey River Special Development Area) Regulations, 1991

Land Utilization (Two Mile Corridor Special Development Area) Regulations, 2001

National Lands Act, No. 6, 1992, as consolidated in 2003

National Parks System Act, No. 5, 1981, as consolidated in 2000

Pomona Village Land Reservation Regulations, 1992, as consolidated in 2003

Protected Areas Conservation Trust Act, No. 15, 1995, as consolidated in 2003

Ramonal-Zapote Reserve Regulations, 1992, as consolidated in 2003
Sarteneja (Closed Area for Hunting) Regulations, 1990
Toledo Indian Reserve Rules, 1992, as consolidated in 2003
Wildlife Protection Act, No. 4, 1981, as consolidated in 2000
Wildlife Protection Regulations, 1980, as consolidated in 2003

BOLIVIA

Constitution, 2009
Supreme Decree Banning All Uses of Wildlife, No. 22.641, 1990
Supreme Decree on Exceptions for Approved Sustainable Management Plans, No. 25.458, 1999
Environmental Law, No. 1.333, 1992
Law on Wildlife, National Parks, Hunting and Fishing, No. 12301, 1975
Management Councils Decree, No. 25.925, 2000
Regulation on Tourism Operations in Protected Areas, 2006
Protected Areas General Regulation, No. 24781, 1997
Supreme Decree on a Mechanism for Vicuña Fiber Commercialization, No. 28.593, 2006, as amended in 2007

BOTSWANA

Constitution, 1966
Wildlife Conservation and National Parks Act, 1992, as amended
Wildlife Conservation and National Parks (Hunting and Licensing) Regulations, 2001, as consolidated in 2005
Wildlife Conservation and National Parks (Cheetahs) (Killing Suspension) Order, 2005
National Parks and Game Reserves Regulations, 2000
Educational Game Reserve Regulations, 2000
Wildlife Conservation and National Parks (Lions) (Killing Restriction) Order, 2005
Wildlife Conservation (Possession and Ownership of Elephant Tusks or Ivory) Regulations, 2001, as consolidated in 2005
Gemsbok National Park Regulations, 1992, as consolidated in 2000
Controlled Hunting Areas (Fees) Order, 1995
Declaration of Private Game Reserve Order, 1992, as consolidated in 2000
Declaration of Private Game Reserves Order, 1968, as consolidated in 1985
Fauna Conservation (Compensation for Destruction of Livestock and Other Property) Order, 1980, as consolidated in 1981

Fauna Conservation (Names of Animals) Regulations, 1967
 Forest Act, 1968, as consolidated in 2005

BRAZIL

Federal Constitution, 1988, as amended
 Environmental Impact Assessment Resolution, No. 001/1986, 1986
 Fauna Law, No. 5197, 1967
 Federal Law on Environmental Crimes, No. 9605/1998, 1998
 IBAMA Regulations (*Instrução Normativa*) on wildlife-related procedures for environmental licensing and impact assessments, No. 146, 2007
 Law on the National System for Nature Conservation Units. Federal Law, No. 9985/2000, 2000
 Ministerial Resolution (*Portaria*) on Captive Breeding, No. 118-N, 1997
 IBAMA Ministerial Resolution (*Portaria*) on Yacare Caiman Ranching, No. 126/90, 1990
 IBAMA Ministerial Resolution (*Portaria*) on Yacare Caiman Skin Trade, No. 119-N/92, 1992
 IBAMA Ministerial Resolution (*Portaria*) on Turtles, No. 142/92, 1992
 National Environmental Policy Law, No. 6938, 1981 as amended
 Federal Law on SISNAMA, No. 6938/1981, 1981
 Decree No. 99274/1990, 1990
 National Tourism Policy Law, No. 11771, 2008
 Regulation for the Design of Participatory Management Plans, Instituto Chico Mendes de Conservação da Biodiversidade (ICMBIO) *Instrução Normativa* 01, 2007
 CONAMA Resolution on Public Hearings, No. 009/1987, 1987

BURKINA FASO

Constitution, 1991, modifiée en 1997 et 2000
 Loi portant Code forestier au Burkina Faso, No. 006/97/ADP, 1997
 Décret portant réglementation de l'exploitation de la faune au Burkina Faso, No. 96-061/PRES/PM/MEE/MATS/MEFP/MCIA/MTT, 1996
 Décret portant réglementation des concessions de gestion de la faune et des activités de concessionnaire et de guide, No. 98-305/PRESS/PM/MEE/MTT, 1998
 Raabo portant organisation des chasseurs au Burkina Faso, No. 0020/CNR/PRES/MET/MATS, 1985
 Raabo portant définition et réglementation de la chasse villageoise, No. AN-VII 0001/F/MET/MAT/MF, 1989

Décret portant conditions de création et de gestion des zones villageoises d'intérêt cynégétique, No. 2008-312 /PRES/PM/MECV/MATD/MEF, 2008
Arrêté portant modalités d'organisation d'examen de guide de chasse, No. 2004-017/MECV, 2004

Arrêté portant conditions d'utilisation des armes à feu pour l'exercice de la chasse au Burkina Faso, No. 2004-018/MECV, 2004

Arrêté portant composition des dossiers de demande de licence de guide de chasse et de titre de concessionnaire, No. 2001-051MEE/SG/DGEF/DFC, 2001

Arrêté conjoint portant fixation des taxes, redevances et titres d'exploitation de la faune au Burkina Faso, No. 96-022/MEE/MICA/MEF, 1996

Décret portant création d'un Office National des Aires Protégées, No. 2008-171/PRES/PM/MEF/MECV/MAHRH, 2008

Arrêté portant recrutement de pisteurs occasionnels et répartition des frais de pistage, No. 244/MF/MET, 1984

Arrêté conjoint portant institution d'un fonds d'aménagement forestier, No. 01-48 MEF/MATD/MEE, 2001

Loi portant Code de l'environnement au Burkina Faso, No. 005/97/ADP, 1997

Décret portant champ d'application, contenu et procédure de l'étude et de la notice d'impact sur l'environnement, No. 2001-342/PRES/PM/MEE, 2001

Décret portant création, attributions, organisation et fonctionnement des cellules environnementales dans les différents départements ministériels, les régions administratives et les entreprises publiques et privées, No. 2008-125/PRES/PM/MECV, 2008

CAMEROON

Constitution, 1992, modifiée par la loi, No. 96-06, 1996

Loi portant régime des forêts, de la faune et de la pêche, No. 94/01, 1994

Décret fixant les modalités d'application du régime de la faune, No. 95-466/PM, 1995

Décret portant organisation du Ministère des Forêts et de la Faune, No. 2005/099, 2005

Décret fixant la rémunération de certains services rendus au titre de l'application du régime des forêts et du régime de la faune, No. 96/238/PM, 1996

Loi relative à la protection des parcs nationaux, No. 78-23, 1978

Loi portant loi-cadre relative à la gestion de l'environnement, No. 96-12, 1996

Décret portant organisation et fonctionnement du comité interministériel de l'environnement, No. 2001/718/PM, 2001

Décret modifiant et complétant le décret No. 2001/718/PM portant organisation et fonctionnement du comité interministériel de l'environnement, No. 2006/1577/PM, 2006

Arrêté portant création d'un comité interministériel de facilitation pour l'exécution du programme sectoriel forêts/environnement, No. 100/PM, 2006

Décret portant création d'une commission nationale consultative pour l'environnement et le développement durable, No. 94-259/PM, 1994

Décret fixant les modalités d'application du régime des forêts, No. 95-531/PM, 1995, as amended by Décret No. 2000/092/PM, 2000

Décret fixant les modalités de fonctionnement des fonds spéciaux prévus par la loi No. 94-01 portant régime des forêts, de la faune et de la pêche, No. 96-237/PM, 1996

Décret modifiant certaines dispositions du décret No. 96-237/PM fixant les modalités de fonctionnement des fonds spéciaux prévus par la loi No. 94-01 portant régime des forêts, de la faune et de la pêche, No. 99/711/PM, 1999

CANADA

Constitution Acts, 1867 and 1982

Access to Information Act, 1985 as amended

Canadian Environmental Assessment Act, 1992, last amended in 2005

Canada National Parks Act. *S.C. 2000, c. 32*, last version of 20 June 2009

Canada Wildlife Act. *R.S.C. 1985, c. W-9*, last version of 1 April 2005

Canadian Environmental Protection Act, 1999. *S.C. 1999, c. 33*, last version of 1 July 2007

Migratory Birds Convention Act, 1994. *S.C. 1994, c. 22*, last version of 1 July 2007

Migratory Birds Regulations. *2000, CRC c. 1035*, last version in 2009

Migratory Birds Sanctuary Regulations. *1994, CRC c.1036*, last version in 2009

National Historic Parks Wildlife and Domestic Animals Regulations. *SOR 81-613*, last version in 2009

National Wildlife Area Regulations. *2003, CRC c. 1609*, last version in 2009

Parks Canada Agency Act. *S.C. 1998, c. 31*, last version of 31 December 2005

Regulations Amending the Migratory Birds Regulations. *P.C. 2009-901*

Regulations Respecting the Protection of Certain Species of Wild Animals and Wild Plants and the Regulation of International and Interprovincial Trade in those Species. *SOR/96-263*, last version in 2009

Species at Risk Act. *S.C. 2002, c. 29*, last version of 26 February 2009

Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act. *S.C., 1992, c. 52*, last version of 24 March 2003

Yukon First Nations Self-Government Act. *S.C.1994, c. 35*, last version of 9 January 2006

CENTRAL AFRICAN REPUBLIC

Constitution, 2004

Ordonnance portant protection de la faune sauvage et réglementant l'exercice de la chasse en République centrafricaine, No. 84-045, 1984

Loi instituant un conseil supérieur de la chasse, No. 62-343, 1962

Loi portant réglementation applicable aux chasseurs non résidents en matière d'introduction d'armes de chasse et de munitions, No. 61-276, 1961

Décret fixant les conditions d'obtention et les tarifs des permis de capture d'animaux sauvages vivants, No. 84-341, 1984

Ordonnance fixant les conditions de capture et d'exportation d'animaux sauvages vivants, No. 84-062, 1984

Ordonnance portant fermeture de la chasse à l'éléphant, No. 85-005, 1984

Arrêté portant création d'une carte d'identité professionnelle pour les guides de chasse exerçant en République centrafricaine, No. 0633, 1972

Décret portant création d'une brigade de contrôle des produits de chasse au Ministère des eaux, forêts, chasses et pêches, No. 71-435, 1971

Loi réglementant la profession de guide de chasse, No. 60-88, 1960, complétée par le décret No. 68-049, 1968

Décret réglementant l'exercice de la profession de guide de chasse par les guides non- résidents ou non domiciliés en République centrafricaine, No. 66-310, 1966

Loi contre le braconnage dans les parcs nationaux et réserves de faunes, No. 62-333, 1962

Décret portant création d'un Comité national chargé de la protection et de l'utilisation rationnelle de l'environnement et fixant ses attributions, No. 89-047, 1989

Loi portant Code forestier centrafricain, No. 90-003, 1990

CHILE

Constitution, 2005

General Environment Law, No. 19.300, 1994, as modified in 2007

Hunting Law, No. 4601, 1929, including modifications until 1996

Protected Areas Law, No. 18.362, 1984

Regulation to the Hunting Law, 1998, as modified in 2004

CHINA

Constitution, 1982 as amended

Law of the People's Republic of China on the Protection of Wildlife, 1988

Decision of the Standing Committee of the National People's Congress about Amending the Law of the People's Republic of China on the Protection of Wild Animals, 2004

Regulations on the Protection of Terrestrial Wildlife, 1992

Environmental Protection Law, 1989

Measures for the procedure for formulating regulations on environmental protection, 2005

Regulations of the People's Republic of China on Nature Reserves, 1994

Measures for the supervision and inspection of national nature reserves, 2006

Circular Decree of the State Council concerning Strict Protection of Precious and Rare Wild Animals, 1983

Circular of the State Council on Banning the Trade of Rhinoceros Horn and Tiger Bone, 1993

Law of the People's Republic of China on Environmental Impact Assessments, 2002

Provisions on Code of Conduct for Environmental Impact Assessment and Honest and Clean Administration concerning Construction Projects, 2005

Regulation of the People's Republic of China on the Administration of the Import and Export of Endangered Wild Fauna and Flora, 2006

CONGO

Constitution, 2002

Loi sur la faune et les aires protégées, No. 37-2008, 2008

Loi définissant les conditions de la conservation et de l'exploitation de la faune sauvage, No. 48/83, 1983

Loi fixant les différentes taxes prévues par la loi No. 48-83 définissant les conditions de conservation et d'exploitation de la faune sauvage, No. 49-83, 1983

Décret portant application de la loi No. 48-83 du 21 Avril 1983 définissant les conditions de conservation et d'exploitation de la faune sauvage, No. 85/879, 1985

Décret portant attributions, organisation et fonctionnement du centre national d'inventaire et aménagement des ressources forestières et fauniques, No. 2002-435, 2002

Arrêté déterminant les animaux intégralement et partiellement protégés prévus par la loi No. 48/83 du 21 avril 1983 définissant les conditions de la conservation et l'exploitation de la faune sauvage, No. 3863/MEF/SGEF/DCPP, 1984

Arrêté fixant les dispositions relatives à l'exportation des produits de la faune et de la flore sauvage, No. 0103/MEF/SGEF/DOPP, 1984

Arrêté fixant les périodes de chasse et de fermeture de la chasse en République populaire du Congo, No. 3772/MAEF/DFRN, 1972

Loi portant code forestier, No. 16–2000, 2000

Décret portant organisation et fonctionnement du corps des agents des eaux et des forêts, No. 2002-433, 2002

Décret portant organisation et fonctionnement du fonds forestier créé par la loi 16–2000 du 20 Novembre 2000 portant code forestier, No. 2002–434, 2002

Décret portant attributions, organisation et fonctionnement du centre national d'inventaire et d'aménagement des ressources forestières et fauniques, No. 2002–435, 2002

Loi sur la protection de l'environnement, No. 003/91, 1991

Décret portant création du Conseil supérieur de l'environnement, No. 99-280, 1999

Décret portant organisation et fonctionnement du fonds pour la protection de l'environnement, No. 99-149, 1999

Décret rendant obligatoires les études d'impact sur l'environnement en République populaire du Congo, No. 86/775, 1986

COSTA RICA

Constitution, 1949, as amended

Organic Environmental Law, No. 7554, 1995, as amended

Regulations for Hunting Outside Protected Areas and Fishing in Protected Areas, 2009

The Biodiversity Law, No. 7788, 1998

Regulation to the Biodiversity Law, Executive Decree No. 34433, 2008

Regulation to the Wildlife Conservation Law, 2005. Executive Decree No. 32633-MINAE, 2005

Wildlife Conservation Law, No. 7317, 1992 as amended

DEMOCRATIC REPUBLIC OF CONGO

Constitution, 2006

Loi portant réglementation de la chasse, No. 82-002, 1982

Décret portant régime de la chasse et de la pêche, 1937

Arrêté relatif aux mesures d'exécution de la loi No. 82-002 du 28 Mai 1982 portant réglementation de la chasse, No. 014/CAB/MIN/ENV/2004, 2004
Ordonnance fixant les attributions des ministères, No. 08/74, 2008

Arrêté interministériel portant fixation des taux des droits, taxes et redevances à percevoir, en matière de faune et de flore, à l'initiative du ministère de l'environnement, conservation de la nature, eaux et forêts, No.003/CAB/MIN/ECN-EF/2006 et No. 099/CAB/MIN/ FINANCES/2006, 2006

Arrêté ministériel portant agrément de la liste des espèces animales protégées en République Démocratique du Congo, No. 020/CAB/MIN/ECN-EF/2006, 2006

Arrêté ministériel portant modification des taux des taxes en matière forestière et de faune, No. CAB/MIN/EC-FIN/AF.F-E.T/187/02, 2002

Arrêté ministériel fixant les périodes de prélèvement des perroquets gris en République Démocratique du Congo, No. CAB/MIN/AFF.ENV.DT/124/SS/2001, 2001

Arrêté portant réglementation du commerce international des espèces de la faune et de la flore menacés d'extinction, No. 056/CAB/MIN/AFF-ECNPF/01/00, 2000

Arrêté départemental portant dispositions relatives à la délivrance du permis de légitime détention et du permis d'importation ou d'exportation, No. 69, 1980

Arrêté départemental réglementant la profession de guide de chasse, No. 0005/CAB/AGRI/73, 1973

Ordonnance-loi relative à la conservation de la nature, No. 69-041, 1969

Loi relative à la création des secteurs sauvegardés, No. 75-024, 1975

Ordonnance fixant les attributions du département de l'environnement, conservation de la nature et tourisme et complétant l'ordonnance No. 69-147 du 1^{er} Août 1969, No. 75-231, 1975

Ordonnance portant création d'un comité interdépartemental pour l'environnement, conservation de la nature et le tourisme, No. 75-232, 1975

Arrêté ministériel portant dispositions relatives à l'obligation de l'évaluation environnementale et sociale des projets en RDC, No. 043/CAB/MIN/ECN-EF/2006, 2006

Arrêté portant création, organisation et fonctionnement du groupe d'études environnementales du Congo, No. 044/CAB/MIN/ECN-EF/2006, 2006

Loi portant Code forestier, No. 11-2002, 2002

Décret portant composition, organisation et fonctionnement du Conseil consultatif national des forêts, No. 08-03, 2008

Arrêté ministériel portant composition, organisation et fonctionnement des conseils consultatifs provinciaux des forêts, No. 034/CAB/MIN/ECN-EF/2006, 2006

Décret fixant la procédure d'attribution des concessions forestières, No. 08/09, 2008

ECUADOR

Constitution, 2008.

Environmental Management Law, No. 2004-019, 2004

Law on Forestry and Conservation of Natural Areas and Wildlife, No. 2004-017, 2004

Special Law for the Province of Galapagos, No. 67, 1998

Biodiversity Regulations, Unified Ministry of Environment Legislation Decree No. 3516, Title IV, 2002 as amended

ESTONIA

Constitution, 1992, as amended in 2003 and 2007

Animal Protection Act, 2001

Law on Hunting Management, 1994

Law on the Protection and Use of Wild Fauna, 1998

EUROPEAN UNION

Council Directive on the Conservation of Wild Birds, No. 79/409/EEC, 1979, as amended

Council Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora, No.92/43/EEC, 1992, as amended

Council Regulation on the Protection of Species of Wild Fauna and Flora by Regulating Trade therein, No. 338/97, 1996, as amended

Commission Regulation laying down detailed rules concerning the Implementation of Council Regulation (EC) No. 338/97 on the Protection of Species of Wild Fauna and Flora by Regulating Trade therein, No. 338/97, 2006

ETHIOPIA

Constitution, 1987

Development Conservation and Utilization of Wildlife Proclamation, No. 541/2007, 2007, as amended by the Ethiopian Wildlife Development and Conservation Authority Establishment Proclamation, No. 575/2008, 2008

Environmental Impact Assessment Proclamation, No. 299, 2002

Environmental Protection Organs Establishment Proclamation, No. 295, 2002

FRANCE

Constitution, 1958 as consolidated

Environmental Code, as consolidated in 2009

Civil Code, as consolidated in 2009

Penal Code, as consolidated in 2009

GABON

Constitution, 1991, last amended in 2000

Loi portant code forestier en République gabonaise, No. 016-01, 2001

Ordonnance portant modification de certaines dispositions de la loi No. 016/2001 du 31 Décembre 2001 portant Code forestier en République gabonaise, No. 006/PR/2002, 2002

Loi relative aux parcs nationaux, No. 003/2007, 2007

Décret fixant les statuts de l'agence nationale des parcs nationaux, No. 000019/PR/MEFEPPN, 2009

Décret relatif à l'agrément spécial de commerce des produits de la chasse, No. 677/PR/MEFE, 1994

Arrêté portant réglementation des activités forestières, minières, agricoles, aquacoles, cynégétiques et touristiques à l'intérieur d'une zone tampon, No 000118/PR/MEFEPEPN, 2004

Décret portant création d'un Conseil supérieur de la chasse, de la pêche et de la conservation de la faune et de la flore, No. 821/PR/MTEFCS, 1988

Décret relatif aux lieutenants de chasse, No. 186/PR/MEFCR, 1987

Décret relatif aux battues administratives, No. 187/PR/MEFCR, 1987

Décret relatif à la protection de la faune, No. 189/PR/MEFCR, 1987

Décret complétant le décret No. 189/PR/MEFCR du 4 Mars 1987, relatif à la protection de la faune, No. 678/PR/MEFE, 1994

Décret portant protection de la faune, No. 115/PR/MAEFDR, 1981

Décret fixant les périodes d'ouverture et de fermeture de la chasse, No.679/PR/MEFE, 1994

Décret relatif à la répression des infractions en matière des eaux, forêts, faune, chasse et pêche, No. 185/PR/MEFCR, 1987

Décret relatif aux permis et licences de chasse, No. 188/PR/MEFCR, 1987

Décret fixant les modalités de détention, de circulation et de commercialisation des produits de la chasse, No. 190/PR/MEFCR, 1987

Décret réglementant l'exercice des droits d'usages coutumiers, No. 192/PR/MEFCR, 1987

Décret fixant les conditions d'exercice et obligations de la profession de guide de chasse, No. 193/PR/MEFCR, 1987

Loi relative à la protection de l'environnement, No. 16/93, 1993

Décret portant création, attributions, organisation et fonctionnement de la Commission nationale du Développement durable, No. 000925/PR/MEFEPEPN, 2005,

Décret réglementant les Etudes d'impact sur l'environnement, No. 000539/PR/MEFEPEPN, 2005

GEORGIA

Constitution, 1995 last amended in 2006

Law on Environment Protection, 1996

Law on Wildlife, 1996

Forest Code, 1999

Order of the Minister of the Environment on the Approval of the Statute of "Rules and Registry Methods of Animal World Objects accounting on the limited territory of the State Forest Fund", No. 98, 2002

Government Regulation containing Rules and Conditions for Issuing Forest Management Licenses, No. 132, 2005

Order of the Minister of the Environment on the Approval of Regulations on the Animal Objects, the Rules of their Hunting according to Species, Terms and a List of Weapons and Equipment Permitted for their Hunting Regulates Specific Aspects of Hunting, No. 512, 2005

Order of the Minister of the Environment on the approval of "Dates of Commencing and Completion of Hunting and Fishing", No. 97, 2002

Order of the Minister of the Environment on the approval of "the List of Animal Objects assigned to Hunting Objects", No. 68, 1999

Law on Environmental Permits, 1996

Law on State Ecological Expertise, 1996

Law on Licenses and Permits, 2005

Government Regulation on Approval of Provisions, Rules and Conditions for Issuing Environmental Impact Permits, No. 154, 2005

Order of the Minister of the Environment on the Procedure for Conducting State Ecological Expertise, No. 193, 2007

Law on the System of Protected Territories, 1996

The Code on Administrative Violations, 2007

GHANA

Constitution, 1992

Wildlife Animals Preservation Act, No. 43, 1961

Wildlife Reserves Regulations, 1971, as amended by the Wildlife Reserves (Amendment) Regulations, 1977

Wildlife Conservation Regulations, 1971, as amended

Environmental Assessment Regulations, 1999, as consolidated in 2004

Environmental Protection Agency Act, 1994, as consolidated in 2004

Trees and Timber Decree, 1974

Trees and Timber (Amendment) Act, No. 493, 1994

Timber Resources Management Act, No. 547, 1997

Timber Resources Management (Amendment) Act, No. 617, 2002

Timber Resources Management Regulations, 1998

GREECE

Constitution, 1975

Law on the protection of the environment, No. 1650, 1986, amended by law No. 3010, 2002

Hunting regulations, Decree Law No. 86, 1969 as amended

Law No. 2055, 1992

Law No. 2637, 1998

Joint Ministerial Decision No. 107017/2006, 2006

Law No. 1845, 1989

Law No. 1335, 1983

Law No. 2204, 1994

GUATEMALA

Constitution, 1985 as amended in 1993

Access to Public Information Law, Decree No. 57/2008, 2008

Environment Protection and Improvement Law, No. 68/86, 1986 as amended

General Hunting Law, Decree No. 36/2004, 2004

Protected Areas Law, Decree No. 4/89, 1989 as amended

Regulation to the Protected Areas Law, *Acuerdo Gubernativo* (AG) No. 759/90 as reformed by AG 263/92, 1990 as amended in 1992

GUYANA

Constitution, 1980 as amended in 1996

Amerindian Act, 1953 as consolidated in 1998

Animals (Movement) and Disease Prevention Act, No. 14, 2003
Environmental Protection Act, 1996, as consolidated in 1998
Iwokrama International Centre for Rain Forest Conservation Act, No. 7, 1996, as consolidated in 1998
Kaiteur National Park Act, No. 4, 1929, as consolidated in 1998
National Parks Commission Act, No. 23, 1977, as consolidated in 1998
Species Protection Regulations, 1999
Wild Birds Protection Act, No. 31, 1919, as consolidated in 1998

INDIA

Constitution, 1949, last amended in 2007
Environment (Protection) Act, No. 29, 1986
Notifications of the Ministry of Environment and Forests regarding public hearings, 1997
Wildlife (Protection) Act, 1972
Wildlife (Protection) Rules, 1995
Wildlife (Protection) Amendment Act, No. 16, 2003
Wildlife (Protection) Amendment Act, No. 39, 2006
Biological Diversity Act, No. 18, 2003
Biological Diversity Rules, 2004
National Board for Wildlife Rules, 2003
Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, No. 2, 2007
Wildlife Stock Rules, 2003
Elephants' Preservation Act, No. 6, 1879
Notification of the Ministry of Environment and Forests: Matheran and surrounding region as an Eco-sensitive Zone, 2003
Wildlife (Protection) Licensing (Additional Matters for Consideration) Rules, 1983

JAPAN

Constitution, 1946
Wildlife Protection and Hunting Law, No. 32, 1918, as amended by law No. 85, 1972
Basic Environmental Law, No. 91, 1993
Law for the Conservation of Endangered Species of Wild Fauna and Flora, No. 75, 1992, as consolidated in 1994
Environmental Impact Assessment Law, No. 81, 1997

Natural Parks Law, No. 161, 1957, as last amended by law No. 1 and No. 29, 2002

Law for the Promotion of Nature Restoration, No. 148, 2002

The Third National Biodiversity Strategy of Japan, Cabinet Decision, 2008

JORDAN

Constitution, 1952

Agriculture Law, No. 44, 2002

Environmental Protection Law, No. 52, 2006

Regulation on natural protected areas and national parks, No. 29, 2005

Regulation on environmental impact assessment, No. 37, 2005

Directive protecting wild animals and birds and regulating hunting and trading, No. Z/34, 2003

KAZAKHSTAN

Constitution, 1995 as amended by Law No. 284, 1998

Law on the Protection, Reproduction and Management of Wildlife, No. 593-II, 2004

Law on Specially Protected Natural Areas, No. 175-3, 2006

Ecological Code, No. 212-3, 2007

Forest Code, No. 477-2, 2003

Interim Instruction of the Procedure for the Conduct of an Environmental Impact Assessment (EIA) of a Planned Economic Activity, 1993

Instruction of the Ministry of Environmental Protection on Procedure of Impact Assessment for Planned Economic and Other Activities on the Environment (which is approved by the Order of the Ministry), No. 204, 2007

Ministerial Decree regarding Validation of the Basic Principle of Development of Protected Areas for the Period up to 2030, No. 1692, 2000

Ministerial Decree regarding the Regulation on Forest and Hunting Committee, No. 1239, 2002

Ministerial Decree regarding the List of Endangered and Rare Wildlife Species, No. 408, 2002

Ministerial Decree regarding the Regulation on Protection and Conservation of the Objects of Historical and Cultural Heritage, Objects of State Protected Areas Classified as Objects of World and National Importance, No. 673, 2003

Ministerial Decree regarding the Regulation on State Protection of Wildlife, No. 1457, 2004

Ministerial Decree regarding the "Program of Conservation and Reproduction of Rare and Endangered Wildlife Hoofed Species and Saiga for the period of 2005-2007", No. 267, 2005

Ministerial Decree regarding the Regulation on the State Registration of Protected Areas, No. 862, 2006

Ministerial Decree establishing the "Programme on Preservation and Rational Use of Water Resources, Wildlife and Development of the Network of Specially Protected Areas for the period from 2008-2010", No. 914, 2007

KENYA

Constitution, 1963 as amended in 2008

Wildlife (Conservation and Management) Act, 1976 as consolidated in 2002

Wildlife (Conservation and Management) (Amendment) Act, No. 16, 1989

Wildlife (Conservation and Management) (National Parks) Regulations, 1976, as amended

Wildlife (Conservation and Management) (Prohibition on Hunting of Game Animals) Regulations No. 120, 1977

Wildlife (Conservation and Management) (Control of Raw Ivory) Regulations, 1976

Declaration regarding Closed Seasons for Game Birds, 2002

Environmental Management and Coordination Act, No. 8, 1999

Environmental (Impact Assessment and Audit) Regulations, No. 101, 2003

Environmental Management and Coordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, No. 160, 2006

National Environmental Tribunal Procedure Rules, No. 191, 2003

Forests Act, No. 7, 2005

Timber Act, 1971

Timber Rules, No. 174/1971, 1971, as consolidated in 2005

KYRGYZSTAN

Constitution, 1993 as amended

Law on Environmental Protection, No. 53, 1999, as amended by Law No. 101, 2003

Regulations on the Ministry of Environment Protection issued by Government Resolution, No. 443, 1996

Presidential Decree No. 462, 2005

Law on Wildlife, No. 13, 2002

Forest Code, 1999, as amended by Law No. 120, 2003

Law on Special Protected Areas, No. 1561-XII, 1994
Law on Biosphere Territories, No. 48, 1999
Law on Mountain Territories, 2002
Instructions on Environmental Impact Assessment, 1997
Instructions on the State Environmental Audit, 1997
Law on Ecological Expertise, No. 54, 2007

LAO PDR

Amended Constitution, 2003
Decree adopting the National Biodiversity Strategy to 2020 and Action Plan to 2010, No. 84, 2004
Environmental Protection Law, 1999
Law on Agriculture, 1998
Forestry Law, 1996
Forestry Law, 2007
Wildlife and Aquatic Law, 2007
Law on Tourism, 2005
Agreement of Long Kone Quarter on the Natural Resources Use Management, 1995
Forest Department Notification, No. 583/94, 1994
Decree on the Establishment of National Forest Reserves, 1993
Council of Ministers Decree on Wild Animals, Fisheries, Hunting and Fishing, No. 118, 1989
Council of Ministers Decree in Relation to the Prohibition of Wildlife Trade, 1986
Forestry Strategy to the Year 2020 of the Lao PDR, PM Decree No. 229/2005, 2005

LESOTHO

Constitution, 1993 as amended
Environment Act, 2001
Forestry Act, No. 17, 1998
Historical Monuments, Relics, Fauna and Flora Act, No. 41, 1967
Land Act, No. 17, 1979
Land (Agricultural Lease) Regulations, No. 100, 1992

LIBERIA

Constitution, 1984
Wildlife and National Parks Act, 1988

Act for the Establishment of a Protected Forest Area Network and Amending Chapter 1 and 9 of the new National Forestry Law, Part II of Title 23 of the Liberian Code of Laws Revised, 2003

Regulation on Revised Administrative Fees on Wildlife Conservation, No. 25, 2000

Environment Protection Law, 2002

Environment Protection Agency Act of Liberia, 2002

National Forestry Law, 2000

National Forestry Reform Law, 2006

Act for the Establishment of a Protected Forest Area Network and Amending Chapter 1 and 9 of the new National Forestry Law, Part II of Title 23 of the Liberian Code of Laws Revised, 2003

MADAGASCAR

Constitution, 1992, modifiée en 1995, 1998 et 2007

Loi relative à la Charte de l'environnement malagasy, No. 90-033, 1990, modifiée par les lois No. 97-012 du 6 Juin 1997 et No. 2004-015 du 19 Août 2004

Arrêté interministériel portant modification du statut du réseau de transfert de gestion des ressources naturelles renouvelables, No. 3090/06, 2006

Décret portant simultanément adoption de la stratégie malgache pour la conservation et le développement durable et création d'une Commission nationale de conservation pour le développement, No. 84-445, 1984

Loi portant Code de gestion des aires protégées, No. 2001-005, 2003

Décret appliquant les articles 2 alinéa 2, 4, 17, 20 et 28 de la loi No. 2001-005 portant Code de gestion des aires protégées, No. 2005-848, 2005

Décret constituant certains territoires en réserves naturelles intégrales pour la protection de la faune et de la flore, No. 66-242, 1966

Loi relative à la gestion locale des ressources naturelles renouvelables, No. 96-025, 1996

Décret relatif aux communautés de base chargées de la gestion local des ressources naturelles renouvelables, No. 2000-027, 2000

Décret relatif aux médiateurs environnementaux, No. 2000-028, 2000

Loi établissant un droit de sortie sur les animaux sauvages et sur les orchidées, No. 71-006, 1971

Décret portant organisation du Conseil supérieur de la protection de la nature, No. 62-321, 1962

Ordonnance fixant le régime de la chasse, de la pêche et de la protection de la faune, No. 60-126, 1960

Décret portant application de l'ordonnance No. 60-126 du 3 Octobre 1960 fixant le régime de la chasse, de la pêche et de la protection de la faune, No. 61-093, 1961

Arrêté fixant les modalités d'application de l'article 14 de l'ordonnance No. 60-126 du 3 octobre 1960, No. 327-MAP/FOR, 1961

Décret fixant la destination à donner aux oiseaux, animaux ou poissons saisis à la suite d'infraction à la réglementation de la chasse, de la pêche et de la protection de la faune, No. 61-088, 1961

Décret répartissant en trois catégories les oiseaux et les autres animaux sauvages vivant sur le territoire de la République Malgache, No. 61-096, 1961

Loi portant révision de la législation forestière, No. 97-017, 1997

Décret portant adoption de la politique forestière malagasy, No. 97-1200, 1997

Arrêté complétant la réglementation en vigueur en matière d'exploitation forestière et réglementant la commercialisation des produits principaux des forêts, No. 5139-94, 1994

Décret fixant les modalités des exploitations forestières, des permis de coupe et des droits d'usage, No. 87-110, 1987

Ordonnance fixant la procédure applicable à la répression des infractions à la législation forestière, de la chasse, de la pêche et de la protection de la nature, No. 60-128, 1960, modifiée par l'ordonnance No. 62-085 du 29 Septembre 1962

MALAWI

Constitution, 1994 as amended

National Parks and Wildlife Act, No. 11, 1992

National Parks and Wildlife (Wildlife Ranching) Regulations, 1994

National Parks and Wildlife (Control of Trophies and Trade in Trophies) Regulations, 1994

National Parks and Wildlife (Control of Trade in Live Animals) Regulations, 1994

National Parks and Wildlife (Game Species) (Classification) Notice, 1994

National Parks and Wildlife (Hunting Weapons) Regulations, 1994

National Parks and Wildlife (Miscellaneous Forms) Regulations, 1994

National Parks and Wildlife (Protected Areas) Regulations, 1994

National Parks and Wildlife (Protected Species) (Declaration) Order, 1994

National Parks and Wildlife (Use of Substances or Devices in Hunting) Regulations, 1994

Environment Management Act, No. 23, 1996

Forestry Act, No. 4, 1997

MALAYSIA

Constitution of the Federation of Malaysia, 1957, last amended by Act No. 1260/2006, 2006

Protection of Wildlife Act, No. 76, 1972

Protection of Wildlife (Amendment) Act, No. A337, 1976

Protection of Wildlife (Amendment) Act, No. 697, 1988

Protection of Wildlife (Amendment of Schedules) Order, 2003

International Trade in Endangered Species Act, No. 686, 2008

Sabah Wildlife Conservation Enactment, No. 6, 1997

Sarawak Wildlife Protection Ordinance, 1998

Sarawak Wildlife Protection Rules, 1998

Malaysia National Biodiversity Policy, 1998

National Parks Act, No. 226, 1980

Parks By-Laws (Federal Territory of Putrajaya), 2002

Sabah Parks Enactment, No. 6, 1984

Sabah Parks (Amendment) Enactment, 1996

Sabah Forest Enactment, No. 2, 1968

Sabah Forest (Amendment) Enactment, No. 8, 1997

Sabah Forest (Amendment) Enactment, No. 1, 1996

Sabah Forest (Amendment) Enactment, 1994

Sabah Forest (Amendment) Enactment, 1992

Sabah Forest (Amendment) Enactment, No. 4, 1984

Sabah Fauna Conservation Ordinance, No. 11, 1963

Sabah Fauna Conservation (Amendment) Enactment, No. 3, 1973

Sabah Fauna Conservation Rules, 1965

Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order, 1987

Environmental Quality Act, No. 127, 1974

Environmental Quality (Prescribed Activities) (Environmental Impact Assessment)(Amendment) Order, 2000

Regulations for the Importation of Wild Carnivores into Malaysia, 2000

Sabah Fauna Conservation (Turtle Farms) Regulations, 1964

MALI

Constitution, 1992

Loi fixant les conditions de gestion de la faune sauvage et de son habitat, No. 95-031, 1995

Décret fixant le taux des redevances et des taxes perçues à l'occasion de l'exploitation de la faune sauvage dans le domaine faunique de l'Etat, No. 01-136/P-RM, 2001

Ordonnance portant création de la direction nationale de la conservation de la nature, No. 98-025/P-RM, 1998

Décret fixant l'organisation et les modalités de fonctionnement de la direction nationale de la conservation de la nature, No. 98-292/P-RM, 1998

Décret portant création des services régionaux et subrégionaux de la conservation de la nature, No. 98-370/P-RM, 2009

Décret déterminant les modalités et conditions d'exercice des droits conférés par les titres de chasse, No. 97-052/P-RM, 1997

Arrêté portant réglementation de l'importation temporaire d'armes de chasse par les touristes, No. 97-972/MATS/MDRE/MFC/MIAT-SG, 1997

Décret fixant les conditions et les modalités d'exercice de la profession de guide de chasse, No. 97-051/P-RM, 1997

Décret fixant les modalités de classement et de déclassement des réserves de faune, des sanctuaires et des zones d'intérêt cynégétique, No. 96-050/P-RM, 1996

Arrêté fixant les conditions d'exercice de la chasse rituelle, No. 95-2489/MDRE-SG, 1995

Décret fixant le cadre institutionnel de la gestion des questions environnementales, No. 98-415/P-RM, 1998

Décret portant institution de la procédure d'étude d'impact sur l'environnement, No. 99-189/P-RM, 1999

Loi fixant les conditions de gestion des ressources forestières, No. 95-004, 1995

MAURITIUS

Constitution, 1968, as amended

Board of Agriculture and Natural Resources Act, 1977, as consolidated in 2002

Consumer Protection (Export Control) Regulations, 2000

Environment Appeal Tribunal (Rules of Procedure) Regulations, 1993

Environment Protection Act, 2002, as amended by the Environment Protection (Amendment) Act, 2008

Forests and Reserves Act, 1983, as amended by the Forests and Reserves (Amendment) Act, 2003

National Heritage Fund Act, 2003

National Heritage Fund (Amendment of Schedule) Regulations, 2008

National Heritage Fund (Amendment of Schedule) Regulations, 2007

National Heritage Fund (Amendment of Schedule) Regulations, 2005

National Parks and Reserves Regulations, 1996
River Reserves (Control of Vegetation) Act, 1946
Shooting and Fishing Leases, 1982
Tourism Authority Act, 2006
Wildlife and National Parks Act, 1993
Wildlife Regulations, 1998

MEXICO

Constitution, 1917, last amended in 2008
Ecological Balance Law, 1988, last amended in 2008
General Wildlife Law, 2000, last amended in 2008
Acuerdo 08-08-96 establishing the National Commission on Protected Areas, 1996

MONGOLIA

Constitution, 1992, as amended
Environment Protection Law, 1995, as amended in 2005
Law on Fauna, 2000
Law on Hunting, 2000
Law on Hunting Resource Use Payments and on Hunting and Trapping Authorization Fees, 1995
Law on the Regulation of Foreign Trade in Endangered Animal and Plant Species and Derivatives Thereof, 2002
Law on Special Protected Areas, 1994
Law on Buffer Zones, 1997
Law on Forestry, 1995, amended in 2007
Law on Reinvestment of Natural Resource Use Fees for the Protection of the Environment and the Restoration of Natural Resources, 2000

NAMIBIA

Constitution, 1990, as amended
Nature Conservation Ordinance, 1975 (No. 4 of 1975) 19 June 1975, as amended
Environmental Management Act, No. 7, 2007
Forest Act, No. 12, 2001
Namibia Wildlife Resorts Company Act, No. 3, 1998, as amended by the State-owned Enterprises Governance Act, 2006
Game Products Trust Fund Act, 1997, as amended by the State owned Enterprises Governance Act, 2006

NEW ZEALAND

Constitution Act, 1986
Conservation Act, 1987, as amended
Conservation Amendment Act, 2000
Conservation Amendment Act, 1999
Conservation Amendment Act, 1998
Conservation Amendment Act, 2001
Conservation Amendment Act, 2003
Conservation Amendment Act, 2004
Conservation Amendment Act, 2005
Resource Management Act, 1991, as amended
Wildlife Act, 1953
Wildlife (Farming of Unprotected Wildlife) Regulations, 1985
Wild Animal Control Act, 1977, as amended
Trade in Endangered Species Act, 1989, as amended
Trade in Endangered Species Order, 2008
Reserves Act, 1977, as amended
National Parks Act, 1980, as amended

NORWAY

Constitution, 1814, amended in 2007
Wildlife Act, No. 38, 1981
Nature Conservation Act, No. 63, 1970, as amended by Act No. 59, 1995

PERU

Constitution, 1993
Criminal Code, Legislative Decree, No. 635, 1991, as amended by Law 29.263, 2005
Environment and Natural Resources Code, Legislative Decree, No. 61, 1990
Forestry and Wildlife Law, Legislative Decree 1090, 2008 as amended by Law No. 29.317, 2009
General Environment Law, 2005
Law on the Sustainable Use and Conservation of Biological Diversity, No. 26.839, 1997
Organic Law for the Sustainable Use of Natural Resources, No. 26.821, 1997
Protected Areas Law, No. 26.834, 1997
Regulation to the Forestry and Wildlife Law, Supreme Decree No. 2-2009-AG, 2009

Supreme Decree on Protected Areas, No. 006-2008 MINAM, 2008
Vicuña Law, No. 26.496, 1995

PHILIPPINES

Constitution, 1987

Executive Order providing for the reorganization of the Department of Environment, Energy and Natural Resources renaming it as the Department of Environment and Natural Resources, and for other purposes, No. 192, 1987

Philippine Environment Code, Presidential Decree, No. 1152, 1988

DENR Administrative Order establishing a national List of Rare, Endangered, Threatened, Vulnerable, Indeterminate and Insufficiently Known Species of Philippine Wild Birds, Mammals and Reptiles, No. 48, 1991

National Integrated Protected Areas System Act, No. 7586, 1992

Republic Act adopting the Strategic Environment Plan for Palawan, creating the administrative machinery to its implementation, converting the Palawan integrated area development project office to its support staff, providing funds therefore and for other purposes, No. 7611, 1992

National Integrated Protected Areas System Implementing Rules and Regulations DENR Administrative Order, No. 25, 1992

Executive Order creating a Philippine Council for Sustainable Development, No. 15, 1992

DENR Memorandum Circular prescribing Guidelines for the Establishment and Management of Buffer Zones for Protected Areas, No. 16, 1993

Indigenous Peoples Rights Act, No. 8371, 1997

Animal Welfare Act, No. 8485, 1998

Wildlife Resources Conservation and Protection Act, No. 9147, 2001

Mt. Kanla-on Natural Park (MKNP) Act, No. 9154, 2001

Presidential Proclamation declaring a certain parcel of land of the public domain located at Baranguay Binlod, municipality of Argao, province of Cebu for eco-tourism site purposes, No. 557, 2004

Presidential Proclamation declaring as eco-tourism park and campsite purposes, a certain parcel of land of the public domain situated in Baranguays Lubigan and Moriones, San Jose, Tarlac, No. 602, 2004

Joint Implementing Rules and Regulations pursuant to Republic Act No. 9147, 2004

DENR Administrative Order establishing the List of Terrestrial Threatened Species and their Categories, and the List of Other Wildlife Species pursuant

to Republic Act No. 9147, otherwise known as the Wildlife Resources Conservation and Protection Act of 2001, No. 2004-15, 2004

DENR Administrative Order on the Registration of Threatened and Exotic Species of Wild Fauna in the Possession of Private Persons and Entities, No. 2004-58, 2004

DENR Administrative Order, addendum to DAO 2004-58 re: Registration of Threatened and Exotic Species of Wild Fauna in the Possession of Private Persons and Entities, No. 2004-60, 2004

Revised Guidelines on the Establishment and Management of Community-Based Program in Protected Areas. DENR Administrative Order, No. 32, 2004

Executive Order creating the National Anti-Environment Crime Task Force, No. 515, 2006

Executive Order establishing the National Policy on Biological Diversity, No. 578, 2006

Rules and Regulations governing Special Uses within Protected Areas, DENR Administrative Order, No.17, 2007

DENR Administrative Order establishing the national List of Threatened Philippine Plants and their Categories, and the List of Other Wildlife Species, No. 2007-01, 2007

DENR Administrative Order amending DAO No. 2007-01 establishing the national List of Threatened Philippine Plants and their Categories and the List of Other Wildlife Species, No. 24, 2007

Revised Implementing Rules and Regulations of the National Integrated Protected Areas System Act. DENR Administrative Order No. 26, 2008

RUSSIA

Constitution, 1993 as amended

Federal Law on Protected Areas, No. 33-FZ, 1995, as amended by Federal Law No. 37-FZ, 2007

Federal Law on Wildlife, No. 52-FZ, 1995

Federal Law on Environmental Protection, No. 7-FZ, 2002, as amended by Federal Law No. 93-FZ, 2008

Ministerial Decree on Hunting and Game Husbandry, No. 1548, 1960, as amended in 1994

Order of the Ministry of Agriculture regarding the Validation of the Regulation on Issuing Hunting Cards, No. 302, 1998

Decree of the Chief Directorate of Hunting and Protected Areas regarding the Issuance of Hunting Permits for Scientific Research, Cultural and Economic Purposes, No. 146, 1961

Decree of the Chief Directorate of Hunting and Protected Areas validating the Regulation on Hunting of Wild Fauna in Accordance with a Hunting Permit (license), 1971

Model Hunting Regulation of the Russian Federation, No. 1, 1988, as amended

Order of the Ministry of Environmental Protection and Natural Resources validating Hunting Regulation on the Territory of Protected Areas for Regulatory and Scientific Research Purposes, No. 24, 1992

Ministerial Decree on Artisanal and Sport Hunting, No. 728, 1993

Regulation of the Ministry of Agriculture regarding the Department for the Protection and Rational Use of game (Hunting Department), 1994

Ministerial Decree enforcing the Regulations on Hunting of Endangered Wildlife Species protected by the Russian Federation, No. 13, 1997, as amended by Ministerial Decree regarding amendments of some Wildlife Regulations, No. 240, 2003

Ministerial Decree amending Ministerial Decree No. 13 enforcing the Regulations on Hunting of Endangered Wildlife Species protected by the Russian Federation, No. 314, 2008

Order of the Ministry of Agriculture regarding validation of the Model Regulation on a local Department for the Protection of Game, No. 438, 1997
Fishing and Hunting Instruction, 1998

Order of the Ministry of Environmental Protection and Natural Resources validating the Regulation on the Issuance of Permits for Hunting and Capture of Endangered Species listed in the Red Book of the Russian Federation, No. 799, 2003, consolidated in 2006

Ministerial Decree validating the Regulation on State Natural Reserves, No. 48, 1991, as amended by Ministerial Decree No. 527, 1996

Order of the Ministry of Environmental Protection and Natural Resources validating General Regulation on Federal Nature Reserves, No. 14, 1993

Ministerial Decree on setting up the Department of Conservation and Rational Use of Wildlife Species at the Ministry of Agriculture, No. 593, 1993

Ministerial Decree regarding the validation of the Regulation on National Parks, No. 769, 1993

Ministerial Decree regarding the Arrangements for the Implementation of Convention on Biological Diversity, No. 669, 1995

Order of the Ministry of Environmental Protection and Natural Resources regarding validation of the Regulation on the modalities of decision-making concerning issuing licenses for exporting wildlife and plants issued by the Ministry of External Economic Relations, No. 40, 1996

Ministerial Decree regarding the modalities of issuing permits (administrative license) for the management of wildlife species listed in the Red Book of the Russian Federation, No. 156, 1996, as amended by Ministerial Decree regarding amendments of some wildlife regulations, No. 240, 2003

Order of the Ministry of Environmental Protection and Natural Resources regarding arrangements for the implementation of the Ministerial Decree No. 156 regarding the modalities of issuing permits (administrative license) for the management of wildlife species recorded in the Red Book, No. 109, 1996

Ministerial Decree on the Red Book of the Russian Federation, No. 158, 1996

Order of the Ministry of Environmental Protection and Natural Resources regarding the arrangements for the implementation of the provisions of Ministerial Decree No. 158 of 1996 on the Red Book of the Russian Federation, No. 119, 1996

Ministerial Decree validating the Requirements for the Prevention of Annihilation of Wildlife Species in Working Processes, in the process of exploitation of arterial roads, pipe-lines, communication lines and power lines, No. 997, 1996

Ministerial Decree regarding the Modalities of Issuing Long-term Licenses for Wildlife Biodiversity, No. 1574, 1996

Ministerial Decree on Strengthening the Protection of Wildlife Species and their Natural Habitat on Forest Lands, No. 1010, 1997

Ministerial Decree regarding Special Authorized State Institutions in the field of Protection, Control and Regulation of Wildlife Species and their Natural Habitats, No. 67, 1998

Order of the Ministry of Agriculture regarding the validation of the Regulation on the Modalities of Issuing Long-term Licenses, No. 569, 2000, as amended by Order No. 678, 2007

Federal Law on General Principles of Organization of Communities of Sparsely Distributed Indigenous Populations of the North, of Siberia and of the Far East, No. 104-FZ, 2000

Ministerial Decree regarding the validation of the Statute of the Ministry of Agriculture, No. 901, 2000

Federal Law on Territories of Traditional Nature Management of Sparsely Distributed Indigenous populations of the North, Siberia and the Far East, No. 49-FZ, 2001

Ministerial Decree regarding the Sphere of Competence of the Federal Forestry Agency, No. 170, 2004

Ministerial Decree validating the Regulation on the Federal Service for Nature Management Supervision, No. 400, 2004, consolidated in 2007

Order of the Ministry of Natural Resources regarding the Issuance of Authorizations by the Federal Service for Nature Management Supervision, No. 9, 2004

Ministerial Decree delineating the Mandate of Federal Executive Bodies in the Sphere of Biological and Chemical Protection of the National Territory, No. 303, 2005

Ministerial Decree validating the Regulation on the Ministry of Environmental Protection and Natural Resources, No. 404, 2008

Ministerial Decree validating the Regulation on the Ministry of Agriculture, No. 450, 2008

Ministerial Decree validating the Regulation on State Control in the Sphere of Protection, Stock Enhancement and Management of Wild Fauna and its Natural Habitats, No. 843, 2008

SEYCHELLES

Constitution of the Republic of Seychelles, 1993, as amended

Birds' Eggs Act, 1933, as consolidated in 1991

Birds' Eggs and Birds' Eggs Products (Exportation) Regulations, 1941, as consolidated in 1991

Birds' Eggs (Collection) Regulations, 1972, as consolidated in 1991

Environment Protection Act, 1994, as consolidated in 1994

Environment Protection (Marine Parks Authority) Order, 1996

National Parks and Nature Conservancy Act, 1969, as consolidated in 1974

National Parks and Nature Conservancy (Procedure for Designation of Areas) Regulations, as consolidated in 1991

Order relative to Quota of Birds' Eggs and Products, 1941, as consolidated in 1991

Port Launay Marine National Park Regulations, 1981

St. Anne Marine National Park Regulations, 1973, as consolidated in 1991

State Land and River Reserves Act, 1903, as consolidated in 1991

Wild Animals and Birds Protection Act, 1961, as consolidated in 1991

Wild Birds Protection (Nature Reserves) Regulations, 1966, as consolidated in 1991

Wild Birds Protection Regulations, 1966, as consolidated in 1991

SOUTH AFRICA

Constitution of the Republic of South Africa No. 108, 1996 as amended

National Environmental Management Act, No. 107, 1998

National Environmental Management Biodiversity Act, No. 10, 2004

National Environmental Management Protected Areas Act, No. 57, 2003
National Parks Act, 1976
Regulations for the Proper Administration of Special Nature Reserves, National Parks and World Heritage Sites, No. R. 1061, 2005
National Principles, Norms and Standards for the Sustainable Use of Large Predators in South Africa, 2003
National Forests Act, No. 84, 1998
Sea Birds and Seals Protection Act, repeal the Fish Protection Act, 1893 (Act No. 15 of 1893 of the Cape of Good Hope), and the provisions of the Sealing and Fisheries Ordinance, 1949 (Ordinance No. 12 of 1949 of South West Africa), relating to the Killing, Pursuit or Capture of Seals. 1973, as consolidated in 1975

SUDAN

Sudan Constitution, 1998 as amended
Ordinance for the Preservation of Wild Animals, No. 5, 1935
Game Regulations, No. 35, 1935, as amended by the Game (Amendment) Regulations No. 13, 1961
National Parks, Sanctuaries and Reserves Regulations, No. 23, 1939, as amended by the National Parks, Sanctuaries and Reserves (Amendment) Regulations, No. 11, 1965
Forests and Renewable Natural Resources Act, No.11, 2002
Forestry Commission Act, 2003
Timber Utilization and Management Act, 2003
Environmental Protection Act, 2001

SWAZILAND

Constitution of the Kingdom of Swaziland Act, 2005
Environmental Audit, Assessment and Review Regulations, 2000
Environmental Management Act, 2002
Game Act, 1953
Game (Amendment) Act, 1991
Game Control Act, 1947
Forest Preservation Act, 1910
National Trust Commission Act, No. 9/1972, 1972, as consolidated in 1973
Private Forests Act, 1951
Safeguarding of Swazi Areas Act, 1910
Swaziland Environment Authority Act, 1992
Wild Birds Protection Act, 1914

SWITZERLAND

Federal Constitution, 1999 as consolidated

Ordinance on the Organization of the Federal Department on Environment, Transport, Energy and Communication, 1999, consolidated in 2009

Federal law on Animal Protection, 2005, consolidated in 2008

Federal Law on Hunting and the Protection of Mammals and Wild Birds, 1986, as consolidated in 2008

Federal Ordinance on Hunting and the Protection of Mammals and Wild Birds, 1988

Federal Law on the Protection of Nature and Landscape, 1966, as consolidated in 2008

Ordinance on the Federal Franc Districts, 1991

Ordinance on the Waterbird and Migratory Birds of National and International Importance, 1999, as consolidated in 2009

Directive of the Federal Department of Environment, Transport, Energy and Communication for the Restoration and Preservation of Wildlife Corridors, 2001

TAJIKISTAN

Constitution, 1994, as amended

Law on Wildlife, No. 354, 2008

Law on Environmental Protection, 1993 as amended

Law on Specially Protected Natural Areas, 1996

Ministerial Decree providing the Regulation on the Ministry of Environmental Protection, No. 362, 1992

Forest Code, 1993, amended by Law No. 421, 1997

Land Code, 1996, as amended

Ministerial Decree on the Arrangements for the Improvement of Hunting Management, No. 324, 1997

Ministerial Decree providing the Regulation on the State Forest Service, No. 134, 1999

Law on Ecological Expertise, 2003

TANZANIA

Constitution of 1977, as amended

Environmental Management Act, No. 20, 2004

Marine Parks and Reserves Act, No. 29, 1994

Marine Parks and Reserves (Declaration) Regulations, 1999

Fisheries (Marine Reserves) Regulations, 1975

Wildlife Conservation Act, No. 12, 1974, as amended
 Wildlife Protection Fund Regulations, 1981
 Wildlife Conservation (Game Controlled Areas) Order, 1974
 Wildlife Conservation (Game Reserves) Order, 1974
 Wildlife Conservation (National Game) Order, 1974
 Wildlife Conservation (Suitable Weapons) Order, 1974
 Wildlife Conservation (Close Season) Order, 1974
 Wildlife Conservation (Registration of Trophies) Regulations, 1974
 Wildlife (Capture of Animals) Regulations, 1974
 Wildlife Conservation (Authorized Officers) (Identity Cards) Regulations, 1974
 Wildlife Conservation (Commercial Game Photography) Regulations, 1974
 Wildlife Conservation (Compounding of Offences) (Forms) Regulations, 1974
 Wildlife Conservation (Dealings in Trophies) Regulations, 1974
 Wildlife Conservation (Hunting of Animals) Regulations, 1974
 Wildlife Conservation (President's Licence) Regulations, 1974
 Tanzania Wildlife Corporation (Establishment) Order, 1974
 National Parks Ordinance, No. 12, 1959, as amended
 Ngorongoro Conservation Area Ordinance, No. 14, 1959, as amended
 Ngorongoro Conservation Area Ordinance (Establishment of Ngorongoro Pastoral Council) Rules, 2000
 Ngorongoro Conservation Area Authority (Control of Settlement, Residence, and Prevention of Soil Erosion, Flora and Fauna) By-laws, 1992
 National Environment Management Act, 1983
 Forest Act, No. 7, 2002 (Act of 2002), as amended by the Written Laws (Miscellaneous Amendments) Act, No. 19, 2004
 Forest Resources Management and Conservation Act, No. 10, 1996
 Land Tenure Act (Zanzibar), No. 12, 1992
 Land Act, No. 4, 1999
 Serengeti Wildlife Research Institute Act, No. 4, 1980

TONGA

Constitution, 1875
 Birds and Fish Preservation Act, 1915, last amended in 1989
 Parks and Reserves Act, 1977, last amended in 1988
 Environment Impact Assessment Act, 2003

TURKEY

Constitution, 1982, last amendment in 2007

Law on the Protection of the Environment, No. 2872, 1983, as amended by Law No. 5491, 2006

Law on Animal Protection No. 5199, 2004

Terrestrial Hunting Law, No. 4915, 2003

Law on National Parks, No. 2873, 1983

Regulation on National Parks, 1986

Regulation on the National Parks Fund, 1987

Forest Code, Law No. 6831, 1956 as amended

Law on the Institution of the Ministry of Environment and Forestry, 2003

Regulation on Environmental Impact Assessment, 2008

Regulation regarding the Setting and Managing of Hunting Areas, 2004

Regulation on the Implementation of the Convention on the International Trade in Endangered Species (CITES), 2004

Regulation on Wildlife Protection Areas and Wildlife Development Areas, 2004

Regulation on Hunting Procedures and Principles Applicable to Local and Foreign Hunters, 2005

Regulation on Wetlands, 2005, supplemented by the Circular No. 1 on the Protection of Wetlands, 1993

Regulation on Breeding and Trading Game and Wild Animals and their Products, 2005

Regulation regarding the Protection of Game and Wild Animals and their Habitats, 2005

TURKMENISTAN

Constitution, 1992 as amended

Law on Nature Protection, No. 600-XII, 1991

Law on State Specially Protected Natural Areas, No. 702-XII, 1992

Law on Protection and Rational Use of Wildlife, No. 230-I, 1997, amended in 1999

Law on Hunting and Hunting Management, No. 312-I, 1998

Forest Code, 1993

Law on State Ecological Expertise, No. 54-I, 1995

Law on Tourism, 1995

Regulation on Hunting and Hunting Management, No. 2422, 1995

Presidential Decree on Approval of Regulation on Hunting and Hunting Management, No. 2422, 1995

Regulation on State Reserves, No. IIB-1137, 1995

Regulation on Guarding Zones of State Reserves, No. ПБ-1137, 1995
Regulation on State Wilderness Areas, No. ПБ-1137, 1995
Regulation on State Natural Monuments, No. ПБ-1137, 1995
Presidential Decree on the Red Book, 1997
Law on Licensing of Some Types of Activity, 1999
Land Code, 2004

UGANDA

Constitution, 1995 as amended
Uganda Wildlife Act, 2000
National Environment Statute, No. 4, 1995

UNITED KINGDOM

Wildlife and Countryside Act, 1981, as consolidated in 2002
Environment Act, 1995
National Parks and Access to the Countryside Act, 1949
The Conservation (Natural Habitats, & c.) Regulations, 1994
Control of Trade in Endangered Species (Enforcement) Regulations, 1997 as amended
Hunting Act, 2004

UNITED STATES

Constitution, 1787 as amended
Animal Damage Control Act (7 USC 426), 1931
Bald Eagle Protection Act (16 USC 668), 1940
Endangered Species Act (16 USC 1361), 1973
Federal Aid in Wildlife Restoration Act (Pittman-Robertson Act) (16 USC 669), 1937
Federal Land Policy and Management Act (43 USC 1701), 1976
Fish and Wildlife Act (16 USC 742), 1956
Fish and Wildlife Conservation Act (16 USC 2901), 1980
Fish and Wildlife Coordination Act (16 USC 5), 1985
Lacey Act (16 USC 3371), 1900
Migratory Bird Conservation Act (16 USC 715), 1929
Migratory Bird Hunting Stamp Act (16 USC 718), 1934
National Environmental Policy Act (42 USC 4321), 1969
National Fish and Wildlife Foundation Establishment Act (16 USC 3701), 1984
National Forest Management Act (16 USC 1600), 1976
National Wildlife Refuge System Administration Act (16 USC 668), 1966

North American Wetlands Conservation Act (16 USC 4401), 1989
Organic Act (16 USC 1), 1918
Sikes Act (16 USC 670), 1960
Transfer of Certain Real Property for Wildlife Conservation Purposes Act (16 USC 667), 1948
United States Constitution, 1787, as amended 1992
Weeks-McLean Migratory Bird Act (16 USC 703), 1918
Wild Bird Conservation Act of 1992 (16 USC 4901), 1992
Wilderness Act (16 USC 1131), 1964

UZBEKISTAN

Constitution, 1992
Law on Nature Protection, No. 754-XII, 1992 as amended
Law on the Protection and Usage of the Animal World, No. 545-I, 1997
Law on Protected Natural Territories, 2004
Law on Ecological Expertise, 2000
Law on Forests, No. 770-1, 1999
Ministerial Decree on Approval of the Regulation on State Monitoring of the Environment in the Republic of Uzbekistan, No. 111, 2002
Ministerial Decree on the control, No. 508, 2004

VIETNAM

Constitution, 1992
Law on Biodiversity, No. 20/2008/HQ12, 2008
Environmental Protection Law, No. 52/2005/QHL 1, 2005
Decree detailing and guiding the implementation of a number of articles of the Law on Environmental Protection, No. 80/2006/ND-CP, 2006
Decision promulgating the Regulation on the Conditions for and Provision of the Service of Appraising Environmental Impact Assessment Reports, No. 19/2007/QD-BTNMT, 2007
Circular guiding Strategic Environmental Assessment, Environmental Impact Assessment and Environmental Protection Commitment, No. 05/2008/TT-BTNMT, 2008
Law of Forest Protection and Development, 2004
Decision promulgating the Regulation on Forest Management, No. 186/2006/QD-TTg, 2006
Circular guiding the implementation of a number of provisions of the Regulation on Forest Management, No. 99/2006/TT-BNN, 2006

Decree on Assigning and Leasing of Forestry Land to Organizations, Households and Individuals for Stable and Long-term Use for Forestry Purposes, No. 163/1999/ND-CP, 1999

Government Decree on Administrative (fines) Punishment of Forest Management, Protection for Violations in Wild Fauna and Flora under IA and IB Categories (rare, valuable and protected species), No. 159/2007/ND-CP, 2007

Decision approving the National Action Plan on Biodiversity up to 2010 and orientations up to 2020 for implementation of the Convention on Biological Diversity and the Cartagena Protocol on Biosafety, No. 79/2007/QD-TTg, 2007

Decree defining the Functions, Tasks, Powers and Organizational Structure of the Ministry of Natural Resources and Environment, No. 25/2008/ND-CP, 2008

Decision promulgating the government's action program for implementation of the Politburo's Resolution No. 41-NQ/TW on Environmental Protection in the Period of Accelerated National Industrialization and Modernization, No. 34/2005/QD-TTg, 2005

Decree on Sanctioning of Administrative Violations in the domain of Environmental Protection, No. 81/2006/ND-CP, 2006

Decision defining the Functions, Tasks, Powers and Organizational Structure of the Environmental Department, No. 13/2004/QD-BTNMT, 2004

Decision defining the Functions, Tasks, Powers of the Environmental Impact Appraisal and Assessment Department, No. 14/2004/QD-BTNMT, 2004

Decree on Administrative Sanctioning of Acts of Goods Speculation and Hoarding, Excessive Price Hiking, Rumor Spreading, Smuggling and Trade Frauds, No. 107/2008/ND-CP, 2008

Decision promulgating the Regulations on the Working Relationship between the Ranger Department and the National Parks under the Ministry of Agriculture and Rural Development, No. 34/1999/QD-BNN-TCCB, 1999

Statute of Natural Parks and Natural Reserves Association Branches, 1995

Decision approving the Strategy on Application and Development of Natural Resources and Environment Information Technology till 2015 and Orientation towards 2020, No. 179/2004/QD-TTg, 2004

Decision promulgating the "Program on Conservation of Biodiversity in Central Truong Son Ecological region in the 2004-2020 Period", No. 06/2004/QD-BNN, 2004

Decision approving the Strategy on Management of the System of Viet nam's Nature Conservation Zones till 2010, No. 192/2003/QD-TTg, 2003

Decree on Management of Endangered, Precious and Rare Forest Plants and Animals, No. 32/2006/ND-CP, 2006

Decision promulgating the Regulation on Management of Ecotourism Activities in National Parks and Nature Reserves, No. 104/2007/QD-BNN, 2007

Decree on Management of Export, Import, Re-export, Introduction from the Sea, Transit, Breeding, Rearing and Artificial Propagation of Endangered Species of Precious and Rare Wild Fauna and Flora, No. 82/2006/ND-CP, 2006

Decision promulgating the Regulation on Management of Raised Bears, No. 95/2008/QD-BNN, 2008

ZAMBIA

Constitution of Zambia, 1996, as amended by Act No. 18, 1996

Environment Protection and Pollution Control Act, 1990

Environmental Protection and Pollution Control (Environmental Impact Assessment) Regulations, 1997

Zambia Wildlife Act, 1998

Zambia Wildlife (Elephant) (Sport Hunting) Regulations, 2005

Zambia Wildlife (Community Resource Boards Revenue) Regulations, 2004

National Parks Regulations, 1993

National Parks and Wildlife (Night Game Drives) Regulations, 1997

National Parks and Wildlife (Bird Sanctuaries) Regulations, 1993

National Parks and Wildlife (Camping Sites) Regulations, 1993

National Parks and Wildlife (Elephant and Rhinoceros) Regulations, 1993

National Parks and Wildlife (Game Animals) Order, 1993

National Parks and Wildlife (Licence and Fees) Regulations, 1993

National Parks and Wildlife (Methods of Hunting) (Restriction) Regulations, 1993

National Parks and Wildlife (Prescribed Trophies) Regulations, 1993

National Parks and Wildlife (Prohibition of Holding Both a District Game Licence and a National Game Licence) Regulations, 1993

National Parks and Wildlife (Sumbu National Park) (Use of Boats) Regulations, 1993

National Parks and Wildlife (Trophy Dealers) Regulations, 1993

National Parks and Wildlife (Wild Animals in Captivity) Regulations, 1993

Forests Act, 1999

Local Forests (Control and Management) Regulations, 2006

ZIMBABWE

Constitution, 1980 as amended

Environmental Management Act, 2002

Rural District Councils Act, 1988, as last amended by Act No. 13, 2002

Parks and Wildlife Act, 1975 as amended

Trapping of Animals (Control) Act, 1972

Protection of Wildlife (Indemnity) Act, 1989

Parks and Wildlife (General) Regulations, 1981

Quelea Control Act, 1972

Parks and Wildlife (Payment for Hunting of Animals and Fish) Notice, 1987

Forest Act, 1949

FAO LEGISLATIVE STUDIES

1. Wildlife and national park legislation in Asia, 1971 (E*)
2. Wildlife and national park legislation in Latin America, 1971 (E* S*)
3. Vicuña conservation legislation, 1971 (E* S*)
4. Legal systems for environment protection: Japan, Sweden, United States, 1973 (E*)
5. Agrarian law and judicial systems, 1975 (E* F* S*)
6. Agricultural credit legislation in selected developing countries, 1974 (E*)
7. An outline of food law, 1983 (E* F S*)
8. Legislación de aguas en América Central, Caribe y México – Vol. I, 1983 (S)
9. A legal and institutional framework for natural resources management, 1983 (E S)
10. Water law in selected European countries (Belgium, England and Wales, France, Israel, Italy, Spain, Turkey) – Vol. I, 1979 (E* F S*)
11. Fundamentos teóricos para una legislación tributaria en el sector agropecuario, 1976 (S*)
12. International food standards and national laws, 1976 (E F*)
13. Derecho agrario y desarrollo agrícola: estado actual y perspectivas en América Latina, 1978 (S*)
14. Legal and institutional responses to growing water demand, 1977 (E* F* S*)
15. Systematic index of international water resources treaties, declarations, acts and cases by basin – Vol. I, 1978 (E/F/S*)
16. Seed legislation, 1980 (E F* S)
17. Water law in selected African countries, 1980 (E* F S)
18. Reforma agraria y desarrollo rural integrado, 1979 (S*)
19. Water legislation in South American countries, 1983 (E* F S*)
20. Legislation on wildlife, hunting and protected areas in some European countries, 1980 (E* F* S*)
21. Coastal state requirements for foreign fishing has been replaced by the FISHLEX database available at <http://faolex.fao.org/fishery>
22. Agricultural insurance legislation, 1981 (E* S*)
23. The law of international water resources, 1980 (E* F S)
24. Irrigation users' organizations in the legislation and administration of certain Latin American countries, 1983 (E S)
25. Legislation on wildlife and protected areas in Africa, 1984 (E F)
26. The UN Convention on the Law of the Sea: impacts on tuna regulation, 1982 (E F)
27. Regional compendium of fisheries legislation – West Africa (CECAF Region), 1983 (E/F*)
28. Plant protection legislation, 1984 (E* F S)
29. Legislation on foods for infants and small children, 1983 (E*)
30. Water law in selected European countries (Cyprus, Finland, the Netherlands, Union of Soviet Socialist Republics, Yugoslavia) – Vol. II, 1983 (E)
31. The role of legislation in land use planning for developing countries, 1985 (E)
32. Agricultural census legislation, 1984 (E*)
33. Legislation on productivity in agriculture: a comparative outline, 1985 (E F S)
34. Systematic index of international water resources treaties, declarations, acts and cases by basin – Vol. II, 1984 (E/F/S*)
35. Regional compendium of fisheries legislation (Western Pacific Region) – Vols. I and II, 1984 (E)

36. Legislation controlling the international beef and veal trade, 1985 (E* F S)
37. La législation forestière au Cap-Vert, en Ethiopie, en Gambie, au Mali et en Mauritanie, au Niger, au Rwanda et au Sénégal, 1986 (F)
38. The environmental impact of economic incentives for agricultural production: a comparative law study, 1990 (E F S)
39. Propiedad, tenencia y redistribución de tierras en la legislación de América Central y México, 1986 (S)
40. International groundwater resources law, 1986 (E F S)
41. Land tenure systems and forest policy, 1987 (E F)
42. Regional compendium of fisheries legislation (Indian Ocean Region) – Vols I and II, 1987 (E)
43. Pesticide labelling legislation, 1988 (E F S)
44. La réforme du droit de la terre dans certains pays d'Afrique francophone, 1987 (F)
45. Legal aspects of international joint ventures in agriculture, 1990 (E)
46. The freshwater-maritime interface: legal and institutional aspects, 1990 (E)
47. The regulation of driftnet fishing on the high seas: legal issues, 1991 (E F)
48. Les périmètres irrigués en droit comparé africain (Madagascar, Maroc, Niger, Sénégal, Tunisie), 1992 (F)
49. Analyse préliminaire de certains textes législatifs régissant l'aquaculture, 1993 (F S)
50. Treaties concerning the non-navigational uses of international watercourses – Europe, 1993 (E/F/S)
51. Pesticide registration legislation, 1995 (E F)
52. Preparing national regulations for water resources management, 1994 (E)
53. Evaluation des impacts sur l'environnement pour un développement rural durable: étude juridique, 1994 (F)
54. Legislation governing food control and quality certification – The authorities and procedures, 1995 (E F)
55. Treaties concerning the non-navigational uses of international watercourses – Asia, 1995 (E/F)
56. Tendances d'évolution des législations agrofroncières en Afrique francophone, 1996 (F)
57. Coastal state requirements for foreign fishing has been replaced by the FISHLEX database available at <http://faolex.fao.org/fishery>
58. Readings in African customary water law, 1996 (E/F)
59. Cadre juridique de la sécurité alimentaire, 1996 (F)
60. Le foncier-environnement – Fondements juridico-institutionnels pour une gestion viable des ressources naturelles renouvelables au Sahel, 1997 (F)
61. Treaties concerning the non-navigational uses of international watercourses – Africa, 1997 (E/F)
62. New principles of phytosanitary legislation, 1999 (E F S)
63. The burden of proof in natural resources legislation – Some critical issues for fisheries law, 1998 (E)
64. Política y legislación de aguas en el Istmo centroamericano – El Salvador, Guatemala, Honduras, 1998 (S)
65. Sources of international water law, 1998 (E)

66. Trends in Forestry Law in America and Asia, 1998 (E F S)
67. Issues in water law reform, 1999 (E)
68. Extracts from international and regional instruments and declarations, and other authoritative texts addressing the right to food, 1999 (E/F/S)
69. Élaboration des réglementations nationales de gestion des ressources en eau – Principes et pratiques, 1999 (F)
70. Water rights administration – Experience, issues and guidelines, 2001 (E)
71. Fisheries enforcement – Related legal and institutional issues: national, subregional or regional perspectives, 2001 (E)
72. Trends in forestry law in Europe and Africa, 2003 (E F)
73. Law and sustainable development since Rio – Legal trends in agriculture and natural resource management, 2002 (E)
74. Legal trends in wildlife management, 2002 (E S)
75. Mountains and the law – Emerging trends, 2003 (E F S)
75. Rev. 1 Mountains and the law – Emerging trends, 2006 (E F S)
76. Gender and law – Women's rights in agriculture, 2002 (E)
76. Rev. 1 Gender and law – Women's rights in agriculture, 2006 (E F S)
77. The right to adequate food in emergencies, 2003 (E)
78. Law and modern biotechnology – Selected issues of relevance to food and agriculture, 2003 (E)
79. Legislation on water users' organizations – A comparative analysis, 2003 (E)
80. Preparing national regulations for water resources management – Principles and practice, 2003 (E)
81. Administración de derechos de agua, 2003 (S)
82. Administrative sanctions in fisheries law, 2003 (E)
83. Legislating for property rights in fisheries, 2004 (E)
84. Land and water – The rights interface, 2004 (E)
85. Intellectual property rights in plant varieties – International legal regimes and policy options for national governments, 2004 (E F S)
86. Groundwater in international law – Compilation of treaties and other legal instruments, 2005 (E)
87. Perspectives and guidelines on food legislation, with a new model food law, 2005 (E)
88. Legal and institutional aspects of urban and peri-urban forestry and greening, 2005 (E)
89. The legal framework for the management of animal genetic resources, 2005 (E)
90. Marco analítico para el desarrollo de un sistema legal de la seguridad de la biotecnología moderna (bioseguridad), 2006 (S)
91. Directrices en materia de legislación alimentaria (nuevo modelo de ley de alimentos para países de tradición jurídica romano-germánica), 2006 (S)
92. Modern water rights – Theory and practice, 2006 (E)
93. integrated coastal management law – **Establishing and** strengthening national legal frameworks for integrated coastal management, 2006 (E)
94. Perspectives et directives de législation alimentaire et nouveau modèle de loi alimentaire, 2007 (F)
95. Recent trends in the law and policy of bioenergy production, promotion and use, 2007 (E)

96. Development of an analytical tool to assess national *Biosecurity* legislation, 2007 (E)
97. Designing national pesticide legislation, 2007 (E S)
98. International trade rules and the agriculture sector – Selected implementation issues, 2007 (E)
99. Forest fires and the law – **A guide** for national drafters on the Fire Management Voluntary Guidelines, 2009 (E)
100. Creating legal space for water user organizations: transparency, governance and the law, 2009 (E)
101. Law for water management: a guide to concepts and effective approaches, 2009 (E)
102. Case studies on bioenergy policy and law: options for sustainability, 2009 (E)
103. Wildlife law and the empowerment of the poor, 2010 (E)


ANNUAL PUBLICATION

A selection of significant and illustrative laws and regulations governing food and agriculture in FAO Member Nations has been replaced by the FAOLEX database available at <http://faolex.fao.org/faolex>

Availability: November 2010

Ar – Arabic	Multil– Multilingual
C – Chinese	* Out of print
E – English	** In preparation
F – French	
S – Spanish	

The FAO Technical Papers are available through the authorized FAO Sales Agents or directly from Sales and Marketing Group, FAO, Viale delle Terme di Caracalla, 00153 Rome, Italy.



Wildlife law can contribute to the legal empowerment of the poor to varying extents by granting local and indigenous communities clear and secure rights to conserve and use sustainably wildlife and benefit from it, particularly through community-based wildlife management schemes; recognizing and supporting sustainable traditional use; and requiring participatory wildlife management planning and impact assessment processes. This study systematically explores the conditions, approaches and options in drafting national wildlife laws that ensure environmental sustainability and empower the poor.

ISBN 978-92-5-106710-9

ISSN 1014-6679



9 789251 067109

I1906E/1/01.10